ø30 Switches and Pilot Lights

TWN TWND Series



Heavy duty switches & pilot lights offer both variety and reliability.



- Pilot light is not approved by EN standards.
- DC-DC convertor unit is not approved by standards.
- \bullet See website for details on approvals and standards.



Model	Features	Page
Plastic TWN Series	The all-time bestseller since first developed. Suitable for versatile applications.	B-304
Diecast Zinc TWND Series	Heavy-duty switches for tough industrial usage.	B-326

B-301

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IDEC

ø30 TWN/TWND Selection Guide

Function		Pushbutton						
Catagony	Flu	ish	Extended		Extended with Half Shroud		Pilot Li	
Category	Momentary	/Maintained	Momentary/Maintained		Momentary/Maintained		Lights	
				Diecast Zinc		Diecast Zinc	S	
Shape							APEM	
				All A			Switches & Pilot Lights	
	ABN1	ABD1	ABN2	ABD2	ABN2G	ABGD2	Control Boxes	
Model	AON1	A0D1	AON2	A0D2	AON2G	A0GD2	Emergency Stop Switches	
Page	B-310	B-326	B-310	B-326	B-310	B-326	Enabling	
							Switches	

Function		Pushbutton						
Cotogony	Extended wit	Extended with Full Shroud		Mushroom		ith Full Shroud	Explosion Proof	
Category	Momentary	/Maintained	Momentar	y/Maintained	Momentary	/Maintained	Terminal Blocks	
		Diecast Zinc		Diecast Zinc		Diecast Zinc		
							Relays & Sockets	
Shape							Circuit Protectors	
							Power Supplies	
							LED Illumination	
Model	ABN2F	ABFD2	ABN3	ABD3	ABN3G	ABGD3		
Model	A0N2F	A0FD2	AON3	A0D3	_	A0GD3	Controllers	
Page	B-310	B-326	B-311	B-327	B-311	B-327	Operator Interfaces	

							Sensors
Function			Push	button			
	Jumbo N	lushroom	Jumbo Mushroom with Shallow Shroud		Jumbo Mushroom	with Deep Shroud	AUTO-ID
Category	Mome	entary	Mom	entary	Momentary		
	_	Diecast Zinc		Diecast Zinc		Diecast Zinc	
							Flush Silhouette
Shape							ø16
							ø22
Model	ABN4	ABD4	ABN4G	ABGD4	ABN4F	ABFD4	ø30
Page	B-311	B-327	B-311	B-327	B-311	B-327	Miniature

Function		Pushbutton							
Category	Mushroom Pushlo	ock Turn Reset (*1)	Mushroom Push Turn Lock		Mushroom Pull				
		Diecast Zinc		Diecast Zinc		Diecast Zinc			
							TWN		
Shape							TWND		
							ARN		
Model	AVN3	AVD3	AJN3	AJD3	AZN3	AZD3	CS		
Page	B-312	B-328	B-312	B-328	B-312	B-328			

Function	Pushbutton					
Category	Mushroom Push-Pull		Pin Lock			
Shape	Ι	Diecast Zinc	—	Diecast Zinc		
Model	—	AYD3	—	ABD8P		
Page	_	B-328	—	B-327		

*1) Cannot be used as emergency stop switch based on ISO 13850 and IEC 60947-5-5.

ø30 TWN/TWND Selection Guide

Pilot	Function		LED Illuminated Pushbutton						
Ē	Cotogony	Extended		Extended wit	h Half Shroud	Extended with Full Shroud			
Lights	Category	Momentar	//Maintained	Momentary	/Maintained	Momentary	/Maintained		
S			Diecast Zinc	-	Diecast Zinc		Diecast Zinc		
						P			
APEM	Shape				—				
Switches & Pilot Lights									
Control Boxes		ALN2	ALD2	ALGN2		ALFN2	ALFD2		
Emergency Stop Switches	Model	AOLN2	AOLD2	AOLGN2	_	AOLFN2	A0LFD2		
Enabling	Page	B-313	B-329	B-313		B-313	B-329		
Switches					·				

Safety Products	Function		LED Illuminated Pushbutton				
Explosion Proof	Category	Musl	hroom	Muchroom Puch	Mushroom Pushlock Turn Reset (*1)		Push Turn Lock
Terminal Blocks		Momentary	//Maintained	Widshroom rush		WidShi Oom	
Relays & Sockets			Diecast Zinc		Diecast Zinc		Diecast Zinc
Circuit Protectors	Shape						_
Power Supplies							
LED Illumination		ALN3	ALD3				
Controllers	Model	AOLN3	AOLD3	AVLN3	AVLD3	AJLN3	_
Operator Interfaces	Page	B-313	B-330	B-314	B-330	B-313	

Sensors								
	Function			Selector	Switches			
AUTO-ID	Category	Kn	ob	Le	Lever		Key	
			Diecast Zinc	Diecast Zinc			Diecast Zinc	
Flush Silhouette	Shape							
ø16								
ø22								
ø30	Model	ASN	ASD	ASN□L	ASD□L	ASN□K	ASD□K	
Miniature	Page	B-316	B-331	B-317	B-332	B-318	B-333	

Pilot Lights	Function		Selector Switch	Selector Pushbutton		
	Category	Кеу	LED Illumir	nated Knob	Ring Op	perator
			Diecast Zinc			Diecast Zinc
TWN						
TWND	Shape					
ARN						
CS	Model	ASNDK-N024401	ASLN	ASLD	ASBN2	ASBD2
	Page	B-319	B-320 B-334		B-323	B-335

Function		LED Illuminated Pilot Light						
Category	Do	ome	Square Extended (IP40)	Rectangular (Marking) (IP40)				
Shape		Diecast Zinc		(
Model	APN1	APD1	UPQN3B	UPQN4				
Page	B-324	B-336	B-324	B-324				

*1) Cannot be used as emergency stop switch based on ISO 13850 and IEC 60947-5-5.

APEM

Control Boxes Emergency Stop Switches Enabling Switches Safety Products Explosion Proof Terminal Blocks

Relays & Sockets Circuit Protectors

Power Supplies LED Illumination Controllers Operator Interfaces

ø30 TWN/TWND Ratings/Specifications

Heavy duty switches & pilot lights offer both variety and reliability. Endures harsh environments.

Equipped with HW-U contact blocks featuring finger-safe (IP20) structure and spring-up terminals.

ø30 TWN Series (plastic)



ø30 TWND Series (Diecast Zinc)





Ratings and Specifications

Contact ratings

V		
Pushbuttons	Rated insulation voltage	600V
Illuminated Pushbuttons	Rated continuous current	10A
Selector Switches Illuminated Selector Switches Selector Pushbuttons	Contact ratings by utilization category JIS C8201-5-1 IEC60947-5-1	AC-15 (A600) DC-13

Contact ratings by utilization category HW-U10 (NO contact), HW-U01 (NC contact)

HW-U10 (NO contact), HW-U01 (NC contact)									AUTO-ID
Operating Volta	Operating Voltage			48V	50V	110V	220V	440V	
AC		AC-12 Control of resistive loads and solid state loads	10A	-	10A	10A	6A	2A	
Operating	50/60 Hz	AC-15 Control of electromagnetic loads (> 72 VA)	10A	-	7A	5A	3A	1A	
Current	DC	DC-12 Control of resistive loads and solid state loads	10A	5A	-	2.2A	1.1A	-	Flush Silho
	DC-13 Control of electromagnets		5A	2A	-	1.1A	0.6A	-	
									ø16

HW-U10R (EM contact/NO contact), HW-U01R (LB contact/NC contact)

Operating Voltage				48V	50V	110V	220V	440V	ø22
	AC	AC-12 Control of resistive loads and solid state loads	5A	_	5A	5A	ЗA	1A	ø30
Operating	50/60 Hz	AC-15 Control of electromagnetic loads (> 72 VA)	5A	-	3.5A	2.5A	1.5A	0.5A	Miniature
Current	DC	DC-12 Control of resistive loads and solid state loads	5A	2.5A	-	1.1A	0.55A	-	Pilot Liahts
		DC-13 Control of electromagnets	2.5A	1A	_	0.55A	0.3A	-	- INCLIGING

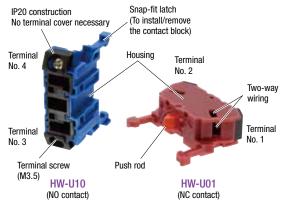
• The operating current represents the classification by making and breaking currents (IEC 60947-5-1).

· Silver contacts

. Minimum applicable load: 3V AC/DC, 5 mA (applicable range may vary with operating conditions and load types)

· For mono-lever switches and cam switches, see the brochures of each product.

HW-U Contact Block



Devit No					
Part No.	HW-U10	HW-U01	HW-U10R	HW-U01R	
Contact					
	1N0	1NC	EM (NO) (early make)	LB (NC) (late break)	
Terminal No.	3-4	1-2	3-4	1-2	
Housing color	Blue	Reddish purple	Blue	Reddish purple	
Push Rod color	Green	Red	Black	White	
Weight	Approx. 11g				

• Up to 4 contacts in two decks can be mounted onto each operator.

(AZN, AZD, AYD: Up to 2 contact blocks in one deck)

· Cannot be used on operators in dark gray or light gray color.

· Gold contact available (gold-plated silver)

Silhouette

Sensors

ø30 TWN/TWND Series

LED Illuminated Part Specifications

×20								
믿	Linit				LED I	amp		
유	Unit	Rated Voltage		Operating Voltage		Lamp Base	Part No.	
- Ei		6V AC/DC		6V AC/DC			LSRD-6	
Pilot Lights				12V AC/DC	_		LSRD-1	
				24V AC/DC			LSRD-2	
		100/110V AC		100/110V AC	-			
APEM		115/120V AC (*1)		115/120V AC (*1)				
	Illuminated pushbutton	120V AC (*2)		120V AC (*2)	100/			
Switches & Pilot Lights	Illuminated selector switch	200/220V AC		200/220V AC	±10%	BA9S/13		
Control Boxes	Pilot light	230/240V AC (*1)	50/60 Hz	230/240V AC (*1)	-			
		240V AC (*2)		240V AC (*2)			LSRD-6	
Emergency Stop Switches		380V AC		380V AC	-			
Enabling		400/440V AC	-	400/440V AC	-			
Switches		480V AC		480V AC	-			
Safety Products		110V DC		90 to 140V DC				

See LED lamps, see LED Lamp Ratings below.
 *1) Illuminated pushbutton, illuminated selector switch

*2) Pilot light Terminal Blocks

Explosion Proof

Relays & Sockets Illuminated Part Type and Shape

Cinquit	······································								
Circuit Protectors			Illuminated Unit				Pilot Light		
Power Supplies	Power Unit	Full voltage adapter	Transfo	rmer	DC-DC converter	Full voltage adapter (unibody)	Transformer	DC-DC converter	
LED Illumination	Rated Voltage	6V, 12V, 24V AC/DC	100 to 240V AC	380V AC min.	110V DC	6V, 12V, 24V AC/DC	100 to 480V AC	110V DC	
Controllers	Polarity	None	None	None	X1 (+) X2 (-)	None	None	X1 (+) X2 (-)	
Operator Interfaces		×1		-				X1	
Sensors		N S							
AUTO-ID	Shape/Terminal		1 700		X1	13 . B	0		
		4	X1 X2	1	X2	(APN1)		X2	

Flush Silhouette

ø22

• Note the polarity for wiring when connecting to DC-DC converter unit. ø16

LED Lamp Ratings (LSRD)

		p natingo					
ø30	Part No.		LSRD-6	LSRD-1	LSRD-2		
Miniature	Lamp Base		BA9S/13				
Willialure	Rated Voltage		6V AC/DC	12V AC/DC	24V AC/DC		
Pilot Lights	Voltage Rang	tage Range 6V AC/DC ±10%		12V AC/DC ±10%	24V AC/DC ±10%		
	Current	DC	10mA	7mA	7mA		
	Draw	AC	14mA	8mA	8mA		
	Voltage Mark	king	Die stamped on the base				
TWN	Life (referend	ce value)	Approx. 50,000 hours The luminance is reduced to 50% the initial intensity when used on complete DC at 25°C.)				
ARN CS			X1 — Noise X2 — Rectifi	d current circuit protection circuit er circuit er protection circuit	Example: LSRD-2		
	Weight Approx. 2g						

X1

X2

• Only one color is available for LSRD so there are no codes to specify the color in the part no.

Switche

Specifications					hes & Pilot Lights
Operating Temperature			Non-illuminated: -25 to -		P:
			Illuminated: -25 to +50°		육
Storage Temperature			-40 to +80°C (no freezin	6,	Lig
Operating Humidity			45 to 85% RH (no condensation)		http://www.alignedication.com
Contact Resistance			50 mΩ maximum (initial	,	
Insulation Resistance			100 MΩ minimum (500V		
Dielectric Strength			(Full voltage and pilot light 2000V AC, (pilot lights: 6)		APEM
Vibration Resistance Damage limits		30 Hz, amplitude 1.5 mm	l	Switches & Pilot Lights	
VIDIATION RESISTANCE	Operation extremes		5 to 55 Hz, amplitude 0.5	mm	
Charle Desistance	Damage limits		1000 m/s ²		Control Boxes
Shock Resistance	Operation extremes		100 m/s ²		Emergency Stop Switches
Momentary		Momentary	5,000,000		Enabling
	Pushbutton	Maintained	500,000 (over 3 contacts	: 250,000)	Switches
	Pushbullon	Push lock turn reset	500,000		Safety Products
		Pull	500,000		
Mechanical Life (minimum operations) Illuminated pushbutton Momentary Maintained		Momentary	2,500,000		Explosion Proof
		Maintained	500,000 (over 3 contacts: 250,000)		Terminal Blocks
	Selector switch		500,000	·	Terminal Blocks
	Key selector switch		500,000		Relays & Sockets
	Illuminated selector swite	ch	500,000		Circuit
	Selector pushbutton		250,000	Protectors	
		Momentary	500,000 Switching free	Switching frequency 1800 operations/h, duty ratio 40%	
	Pushbutton	Maintained	500,000 (over 3 contacts Switching free	: 250,000) juency 900 operations/h, duty ratio 40%	LED Illumination
		Push lock turn reset	500,000 Switching free	quency 900 operations/h, duty ratio 40%	Controllers
Electrical Life		Momentary		quency 1800 operations/h, duty ratio 40%	
(minimum operations) (*1)	Illuminated pushbutton	Maintained	500,000 (over 3 contacts Switching free	: 250,000) juency 900 operations/h, duty ratio 40%	Operator Interfaces
	Selector switch		, ,	quency 1200 operations/h, duty ratio 40%	Sensors
	Key selector switch			quency 1200 operations/h, duty ratio 40%	AUTO-ID
	Illuminated selector swite	ch		quency 1200 operations/h, duty ratio 40%	A010-ID
	Selector pushbutton	1		quency 900 operations/h, duty ratio 40%	
		Pushbutton	ABN122: 82g	ABN322: 87g	
		Illuminated pushbutton	ALN22222DN: 106g	ALN21622DN: 163g	
Weight (approx.)	TWN series	Selector switch	ASN222N: 83g	ASN2K22N: 120g	Flush Silhouette
		Illuminated selector switch	ASLN22222DN: 106g	ASLN21622DN: 163g	ø16
		Pilot light	APN122DN: 46g	APN116DN: 125g	
noight (approx.)		Pushbutton	ABD122: 108g	ABD322: 113g	ø22
		Illuminated pushbutton	ALD22222DN: 132g	ALD21622DN: 189g	ø30
	TWND series	Selector switch	ASD222N: 110g	ASD2K22N: 147g	050
		Illuminated selector switch Pilot light	ASLD22222DN: 133g APD122DN: 75g	ASLD21622DN: 190g APD116DN: 152g	Miniature
1) Load condition 220V AC			AFDIZZDIN. TOY	AFDITODIN. 1529	Pilot Lights

*1) Load condition 220V AC 3A (AC-15)

Degree of Protection

Series	Unit	Model	IEC 60529	JIS C 0920	
	Pushbutton	ABN, AON, AVN			
	Illuminated pushbutton	ALN, AOLN, AVLN			
	Selector switch	ASN, ASN□L			
	Key selector switch	ASN□K	IP65	Dust-proof/jet-proof	
TWN series	Illuminated selector switch	ASLN			
	Selector pushbutton	ASBN		1	
	Round pilot light	APN			
	Square pilot light	UPQN	IP40	_	
	Pushbutton	ABD, AOD, AVD			
	Illuminated pushbutton	ALD, AOLD, AVLD			
	Selector switch	ASD, ASD L			
TWND series Diecast zinc	Key selector switch	ASD□K	IP65	Dustproof/jet-proof	
Diecast zinc	Illuminated selector switch	ASLD			
	Selector pushbutton	ASBD			
	Round pilot light	APD			

• Switches/pilot lights have been tested in a test room in accordance with the degree of protection standards, by installing on an enclosure to valuate the effect on the enclosure or inside the switch or pilot light.

For harsh environment such as torrid/frigid area

TWN/TWND series for harsh environment such as tropical/frigid area is also available (not approved by standards). Contact IDEC for details.

CS

APEM

Control Boxes

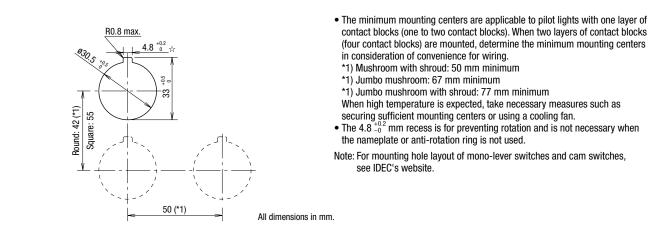
Emergency

Enabling Switches Safety Products

Stop Switches

Explosion Proof Terminal Blocks

Mounting Hole Layout/Mounting Centers



Notes for Ordering

Standard models

Specify Ordering No. when ordering.

- Specify a color code in place of *
- Pilot lights, illuminated pushbuttons, and illuminated selector switches have an LED lamp installed.
- Pilot lights are equipped with a terminal cover.
- Color codes for units without LED lamps:
- R (red), G (green), A (amber), Y (yellow), S (blue)
- When using a commercially available lamp, choose a lamp with rated voltage 5 to 30V AC/DC and 1W maximum, and with the same base and shape. Make sure of correct operation before installation. The operation of TWN/TWND series cannot be guaranteed when a commercially available lamp is used.
- · Terminal covers, nameplates, and accessories for mono-lever switch and cam switch are ordered separately.
- For terminal cover, nameplate and other accessories of mono-lever switches and cam switches, see IDEC's website.

Ordering Information

Pushbutton Flush Silhouette

When specifying gold-plated silver contact and contact configuration:

ø22	$T_{\rm MN}$ action (P. 210 to P. 210)	<codes></codes>
#20	TWN series (B-310 to B-312)	① Optional contact
ø30	ABN 2 11 R - MAU	MAU: Gold-plated silver
Miniature	① Optional contact	© Contact configuration
Pilot Lights	Ontact configuration	10: 1NO
		01: 1NC
		11: 1NO1NC
	TWND series (B-326 to B-328)	20: 2NO
T14/61	TWIND Series (D-320 to D-320)	02: 2NC
TWN	ABD 2 11 NR - MAU	22: 2N02NC
TWND	① Optional contact	40: 4NO
		04: 4NC
ARN	© Contact configuration	13: 1NO3NC
		31: 3N01NC
CS		30: 3NO
		03: 3NC
		12: 1N02NC
		21: 2N01NC

Note:

· Pushbutton with one or three contact blocks contains a dummy block.

Mushroom pull pushbuttons AZN, AZD and mushroom push-pull AYD have up to two contacts in one layer.

Power Supplies

LED Illumination

Controllers

Operator

AUTO-ID

ø16

Interfaces Sensors

Ordering Information

Illuminated Pushbutton

When specifying gold-plated silver contact, contact configuration, and LED operating voltage:

				S S
TWN series (<mark>B-313</mark> to <mark>B-315</mark>) ALFN 2 <u>126 13</u> DN R - <u>MAU</u>	<codes> ① Optional</codes>			
	MAU	: Gold-plated silver		APEM
© Contact configura	10.	configuration 1NO		Switches & Pilot Lights
③ Operating voltage	01:	1NC		Control Boxes
TWND series (B-329 to B-330)		1N01NC 2N0		Emergency Stop Switches
ALFD 2 <u>126 13</u> DN R - <u>MAU</u>		2NC 3NO1NC		Enabling Switches
U Optional contact	22:	2N02NC		Safety Products
© Contact configura © Operating voltage	40.	1NO3NC 4NO		Explosion Proof
	04:	4NC		Terminal Blocks
		Without LED lamp		Relays & Sockets
	11:	6V AC/DC 12V AC/DC		Circuit Protectors
	16:	24V AC/DC 100/110V AC		Power Supplies
		115/120V AC 200/220V AC		LED Illumination
		230/240V AC 380V AC		Controllers
	46:	400/440V AC		Operator Interfaces
Note: • Odd number of contact blocks, such as 1NO, 1NC, 3NO, 2NO-1NC		480V AC for models of 100V AC or o	ver.	Sensors
 Illuminated pushbuttons of 24V AC/DC and below with two or four See B-309 for how to specify 110V DC model (DC-DC converter). 				AUTO-ID
 Color codes for units without LED lamps: R (red), G (green), A (amber), Y (yellow), S (blue) When using a commercially available lamp, choose a lamp with re- analytic data and the second se	ated voltage 5 to 30V AC/DC and 1W m	naximum, and with the same	e base and shape.	
Selector Switch				Flush Silhouette
When specifying gold-plated silver contact and cont	act configuration:			ø16
	-	222)		ø22
TWN series (<mark>B-316</mark> to <mark>B-319</mark>) ASN 2 11 N - MAU	TWND series (<mark>B-331</mark> to <mark>B</mark> ASD 2 <u>11</u> N - <u>MAU</u>	-333)	<codes> ① Optional contact</codes>	ø30
① ① Optional contact	① Op	tional contact	MAU: Gold-plated silver	Miniature
© Contact configuration	② Co	ntact configuration		Pilot Lights

Key removable position code (example)

	Position	Key removable position	Key removable		Part No. Example		
	POSILION	Key removable position	position code	TWN series		TWND series	
		Removable in all positions	(blank)	ASN2K20N	ASN2K20N-N024401	ASD2K20N	TV
	Maintained	Removal in left only	В	ASN2K20NB	ASN2K20NB-N024401	ASD2K20NB	Т
		Removable in right only	C	ASN2K20NC	ASN2K20NC-N024401	ASD2K20NC	
	Spring return from right	Removal in left only	(blank)	ASN21K20N	ASN21K20N-N024401	ASD21K20N	ARN
	Spring return from left	Removable in right only	(blank)	ASN22K20N	ASN22K20N-N024401	ASD22K20N	
		Removable in all positions	(blank)	ASN3K20N	ASN3K20N-N024401	ASD3K20N	
		Removable in left and center	В	ASN3K20NB	ASN3K20NB-N024401	ASD3K20NB	1
		Removable in right and center	C	ASN3K20NC	ASN3K20NC-N024401	ASD3K20NC	1
	Maintained	Removable in center only	D	ASN3K20ND	ASN3K20ND-N024401	ASD3K20ND	1
		Removable in right and left	E	ASN3K20NE	ASN3K20NE-N024401	ASD3K20NE	
		Removal in left only	G	ASN3K20NG	ASN3K20NG-N024401	ASD3K20NG	
0		Removable in right only	Н	ASN3K20NH	ASN3K20NH-N024401	ASD3K20NH	1
3-position		Removable in left and center	(blank)	ASN31K20N	ASN31K20N-N024401	ASD31K20N	1
	Spring return from right	Removable in center only	D	ASN31K20ND	ASN31K20ND-N024401	ASD31K20ND	
		Removal in left only	G	ASN31K20NG	ASN31K20NG-N024401	ASD31K20NG	1
		Removable in right and center	(blank)	ASN32K20N	ASN32K20N-N024401	ASD32K20N	7
	Spring return from left	Removable in center only	D	ASN32K20ND	ASN32K20ND-N024401	ASD32K20ND	1
		Removable in right only	н	ASN32K20NH	ASN32K20NH-N024401	ASD32K20NH	1
	Spring return two-way	Removable in center only	(blank)	ASN33K20N	ASN33K20N-N024401	ASD33K20N	1

• The key cannot be removed in spring return positions.

ø30 TWN/TWND Series

Ordering Information

Illuminated Selector Switch

When specifying gold-plated silver contact, contact configuration, and LED operating voltage:

	TWN series (B-320)		<codes></codes>
APEM	ASLN 2 <u>16 22</u> DN - <u>MAU</u>	$ ^{(1)}$ Optional contact	① Optional contact MAU: Gold-plated silver
Switches & Pilot Lights		— © Contact configuration (see <mark>B-321</mark> to <mark>B-322</mark>)	55. Without LED lamp
Control Boxes	TWND series (<mark>B-334</mark>)	[—] ③ Operating voltage	66: 6V AC/DC 11: 12V AC/DC
Emergency Stop Switches	ASLD 2 16 22 DN - MAU		22: 24V AC/DC 16: 100/110V AC
Enabling Switches		[—] ① Optional contact	136: 115/120V AC
Safety Products		© Contact configuration	256: 230/240V AC
Explosion Proof		— ③ Operating voltage	386: 380V AC 46: 400/440V AC
Terminal Blocks	Note:		486: 480V AC

• Odd number of contact blocks, such as 1NO, 1NC, 3NO, 2NO-1NC, 1NO-2NC, and 3NC, is not available for models of 100V AC or over.

Relays & Sockets • Illuminated selector switches of 24V AC/DC and below with two or four contact blocks contain a dummy block.

 See below for how to specify 110V DC model (DC-DC converter). Circuit

• Color codes for units without LED lamps: R (red), G (green), A (amber), Y (yellow), S (blue) When using a commercially available lamp, choose a lamp with rated voltage 5 to 30V AC/DC and 1W maximum, and with the same base and shape.

Pilot Light (LED)

When specifying LED operating voltage:

TWN series (B-324 to B-325)	<codes></codes>
APN1 <u>26</u> DN R	 ① Operating voltage 99: Without LED lamp
① Operating voltage	66: 6V AC/DC
	11: 12V AC/DC
– UPQN3B <u>22</u> D R	22: 24V AC/DC
① Operating voltage	16: 100/110V AC
	126: 115/120V AC
TWND series (<mark>B-336</mark>)	26: 200/220V AC
	246: 230/240V AC
APD1 <u>26</u> DN R	386: 380V AC
① Operating voltage	46: 400/440V AC
	486: 480V AC

• See below for how to specify 110V DC model (DC-DC converter).

• Color codes for units without LED lamps: R (red), G (green), A (amber), Y (yellow), S (blue)

When using a commercially available lamp, choose a lamp with rated voltage 5 to 30V AC/DC and 1W maximum, and with the same base and shape.

DC-DC Convertor Model (110V DC)

When specifying DC-DC convertor type on illuminated pushbuttons, illuminated selector switches, and pilot lights:

TWN series



<Codes> ① Operating voltage 16 🖂 D: 110V DC

ASLN2 16 11D DN Y

1 Operating voltage

APN1 <u>16 D</u> DN R

① Operating voltage

TWND series

ALD2 16 22D DN G

① Operating voltage

ASLD2 16 11D DN Y

IDEC

① Operating voltage

APD1 <u>16 D</u> DN R

① Operating voltage

• See 110V DC model (DC-DC converter) is not approved by standards (operating voltage: 90 to 140V DC).

Odd number of contact blocks, such as 1NO, 1NO, 3NO, 2NO-1NC, 1NO-2NC, and 3NO, is not available for 100V DC model (DC-DC converter).

Protectors

Power Supplies

LED Illumination

Controllers Operator Interfaces

> Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature

Pilot Lights

ARN

CS

Switches & Pi

Flush/Extended/Extended w/Half Shroud/Extended with Full Shroud

						Package Quantity: 1	lot
Shape	Operation	Contact	Part No. (Ordering No.)	Button Color Code	Dimensions	(All dimensions in mm.)	Pilot Lights
Flush ABN1		1N0	ABN110*	В			S
AON1		1NC	ABN101*	G			
AUNT	Momentary	1NO-1NC	ABN111*	R Y			APEM
	montonialy	2N0	ABN120*	S		Panel Thickness 0.8 to 7.5	
		2NC	ABN102*	W	B B		Switches & Pilot Lights
		2N0-2NC	ABN122*	Note			Control Boxes
		1N0	AON110*	B	BB		Emergency
		1NC 1NC	A0N101*	GR	45.4 (1 or 2 blocks) 65.4(3 or 4 blocks)	9 039	Stop Switches
	Maintained	1N0-1NC 2N0	A0N111*	- Y	- 00.4(0 UI 4 DIOLINO) -	194 1000 A	Enabling
		2N0 2NC	A0N120* A0N102*	S			Switches
		2NC 2NO-2NC	AON102*	W Note			Safety Products
Extended	_	2NU-2NC 1NO	AUN122* ABN210*	NOLE			Explosion Proof
ABN2		1NC	ABN210*	В			
AON2		1NO-1NC	ABN201* ABN211*	G			Terminal Blocks
	Momentary	2N0	ABN220*	R Y		Panel Thickness 0.8 to 7.5	Relays & Sockets
		2NO 2NC	ABN220*	Ś			Circuit
		2NO-2NC	ABN202*	W			Protectors
		1N0 2N0	AON222*				Power Supplies
		1NC	A0N201*	B			
		1N0-1NC	AON211*	G R	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks)	14 <u>29.6</u> 39	LED Illumination
	Maintained	2N0	AON220*	- n Y			Controllers
		2NC	A0N202*	S			Operator
		2NO-2NC	A0N222*	W			Interfaces
Extended with Half Shroud		1N0	ABN2G10*				Sensors
ABN2G		1NC	ABN2G01*	B			AUTO-ID
AON2G		1NO-1NC	ABN2G11*	— G R			
- 6	Momentary	2N0	ABN2G20*	Y	, P	Panel Thickness 0.8 to 3.5	
		2NC	ABN2G02*	S			
		2N0-2NC	ABN2G22*	- W			Flush Silhouette
		1N0	AON2G10*		AA	8335 8335	
		1NC	AON2G01*	B G	40.9 (1 or 2 blocks) 1	18.5	ø16
	Maintainad	1NO-1NC	AON2G11*	R		20.5	ø22
	Maintained	2N0	AON2G20*	Y			
		2NC	AON2G02*	S W			ø30
		2N0-2NC	AON2G22*	٧v			Miniature
Extended with Full Shroud		1N0	ABN2F10*	В			Dilet Linkto
ABN2F AON2F		1NC	ABN2F01*	G			Pilot Lights
AUNZI	Momentary	1NO-1NC	ABN2F11*	R			
	Montonicary	2N0	ABN2F20*	Y	 	Panel Thickness 0.8 to 6	
Market Street		2NC	ABN2F02*	S W	BB		TWN
		2NO-2NC	ABN2F22*				
		1N0	AON2F10*	В			TWND
		1NC	AON2F01*	Ğ	45.4 (1 or 2 blocks)	14 29.6	ARN
	Maintained	1NO-1NC	AON2F11*	R	65.4 (3 or 4 blocks)	16.5	/uuu
		2N0	AON2F20*	Y S			CS
		2NC	AON2F02*	- W			
		2N0-2NC	AON2F22*				1

• Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow), S (blue), W (white)

• Round bezel and shroud (metal): Chrome-plated

• Pushbuttons with 1 or 3 contact blocks have a dummy block.

• See B-307 for other contact configurations and gold-plated silver contacts.

• See B-312 for bottom view.

• Terminal screws: M3.5

• Integrated terminal cover

Note ABN1, AON1 with button color of B (black), G (green), or (R) red Supply of color buttons B, G, R has been discontinued for ABN1/AON1 without color code. When ordering, make sure to specify the required button color code.

ø30 TWN Series

Mushroom/Mushroom w/Full Shroud/Jumbo Mushroom/Jumbo Mushroom w/Shallow Shroud/Jumbo Mushroom w/Deep Shroud

ilot						Package Quantity: 1
liot Lights	Shape	Operation	Contact	Part No. (Ordering No.)	Button Color Code	Dimensions (All dimensions in mm.)
Its	Mushroom		1N0	ABN310*		
	ABN3		1NC	ABN301*	B G	
	AON3	Momentary	1N0-1NC	ABN311*	R	
APEM		Womentary	2N0	ABN320*	Y S	
Switches & Pilot Lights			2NC	ABN302*	W	
Control Boxes			2NO-2NC 1NO	ABN322* AON310*		
Emergency			1NC	AON310*	В	
Stop Switches Enabling		Maintained	1NO-1NC	A0N311*	G R	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 22
Switches		Maintained	2N0	A0N320*	Y	
Safety Products			2NC	A0N302*	S W	
Explosion Proof	Mushroom with Full Shroud		2NO-2NC	A0N322*		
	ABN3G		1N0	ABN3G10*	_	Panel Thickness 0.8 to 6.5
Terminal Blocks			1NC	ABN3G01*	B G	
Relays & Sockets		Momentary	1NO-1NC	ABN3G11*	R	
Circuit Protectors			2N0	ABN3G20*	Y S	
Power Supplies			2NC	ABN3G02*	Ŵ	43.9 (1 or 2 blocks) 63.9 (3 or 4 blocks) 23.5
			2N0-2NC	ABN3G22*		
LED Illumination	Jumbo Mushroom ABN4 🛛 👞		1N0	ABN410*		
Controllers	ADIV4		1NC	ABN401*	P	Panel Thickness 0.8 to 7.5
Operator Interfaces		Momentary	1NO-1NC	ABN411*	B G R Y	
Sensors	W.		2N0	ABN420*		
AUTO-ID			2NC	ABN402*		45.4 (1 or 2 blocks)
AUTU-ID			2N0-2NC	ABN422*		65.4 (3 or 4 blocks) 29
	Jumbo Mushroom with Shallow Shroud		1N0	ABN4G10*		Panel Thickness 0.8 to 7.5
Flush Silhouette	ABN4G		1NC	ABN4G01*		
ø16			1NO-1NC	ABN4G11*	B G	
ø22		Momentary	2N0	ABN4G20*	R	
			2NC	ABN4G02*	. 1	
Ø30			2NO-2NC	ABN4G22*		45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 29
Miniature	Jumbo Mushroom with		1N0	ABN4F10*		Danel Telelence 0.0 to 7.5
Pilot Lights	Deep Shroud ABN4F		1NC	ABN4F01*		Panel Thickness 0.8 to 7.5
			1NO-1NC	ABN4F11*	В	
TWN		Momentary	2N0	ABN4F20*	G R	
TWND			2NC	ABN4F02*	Y	
ARN			2N0-2NC	ABN4F22*		45.4 (1 or 2 blocks)
	 Specify a color code in place of * in 	Davit Nia D (black) O (masses) D	()) (-) -) A/ (-	-11-1

• Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow), S (blue), W (white)

• Round bezel and shroud (metal): Chrome-plated

• Pushbuttons with 1 or 3 contact blocks have a dummy block.

• See B-307 for other contact configurations and gold-plated silver contacts.

• See B-312 for bottom view.

• Terminal screws: M3.5

· Integrated terminal cover

IDEC

CS

Mushroom Pushlock Turn Reset/Mushroom Push Turn Lock/Mushroom Pull

Shape	Contact	Part No. (Ordering No.)	Button Color Code	Dimensions	(All dimensions in mm.)	
Mushroom Pushlock Turn Reset (*1) AVN3	1N0	AVN310N*				
AVINJ	1NC	AVN301N*		Panel 7	Thickness 0.8 to 7.5	
1	1NO-1NC	AVN311N*	R			
	2N0	AVN320N*	Y			
	2NC	AVN302N*		45.4 (1 or 2 blocks)	29.6	
	2N0-2NC	AVN322N*		65.4 (3 or 4 blocks) 23.6		-
Mushroom Push Turn Lock AJN3	1N0	AJN310N*		Panel T	hickness 0.8 to 7.5].
4JN3	1NC	AJN301N*	BG			
1	1NO-1NC	AJN311N*				
	2N0	AJN320N*	R Y			
	2NC	AJN302N*	Ť	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 23.6	29.6	·
	2N0-2NC	AJN322N*		r		
Mushroom Pull	1N0	AZN310N*].
AZN3	1NC	AZN301N*			hickness 0.8 to 7.5	
	1NO-1NC	AZN311N*	B G			
	2N0	AZN320N*	R	414		•
	2NC	AZN302N*	Y	45.4 25.1	5.5 stroke 29.6	-
				40.4 42.1		
Specify a color code in place of * in Part	No R (black) G (groot	a) P (rad) V (vallow)				

• Round bezel (metal): Chrome-plated

• Pushbuttons with 1 or 3 contact blocks have a dummy block.

• See B-307 for other contact configurations and gold-plated silver contacts.

• Mushroom pull has up to 2 contact blocks.

• Terminal screws: M3.5

· Integrated terminal cover

*1) Pushlock turn reset switches cannot be used as emergency stop switches. When emergency stop switches are required, use XN series emergency stop switches (ISO 13850 and IEC 60947-5-5 compliant).

Pushbutton operation

Pushlock Turn Reset

Button is maintained when pressed and is reset when turned clockwise.

Push Turn Lock

Button is locked when turned clockwise in the depressed position and is reset when turned counterclockwise.

<u>Pull</u>

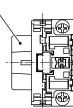
Pulling the button operates the contacts, and releasing the button return the contacts.

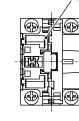
Pull contact operation

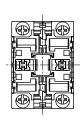
Contact	AZN3						
Contact	Normal	Pull					
1N0	ملم	٥۲					
2N0-2NC	പ്പം 🕂	0 0 1					
2N0	میہ میں	1 0 L 0 L 0 L 0 L 0 L 0 L 0 L 0 L 0 L 0					
2NC	•••	<u></u>					

Bottom View (for non-illuminated pushbuttons and selector switches)

Dummy Block







• See B-348 for wiring.

• Integrated terminal cover



Control Boxes
Emergency Stop Switches
Enabling Switches
Safety Products
Explosion Proof

inal Blocks

ys & Sockets

uit ectors

er Supplies

Illumination rollers

rator faces

Sensors AUTO-ID

Flush Silhouette ø16

Miniature

ø22

Pilot Lights

TWND ARN CS

1 contact block (NO) (NC: opposite position) 3 contact blocks

Dummy Block

2/4 contact blocks

ø30 TWN Series

LED Illuminated Extended/Extended with Half Shroud/Extended with Full Shroud

E						Part No.		ckage Quantity: Dimensions
Pilot Lights	Shape	Base	Operation	Operating Voltage	Contact	(Ordering No.)	Color Code	Page
	Extended				1NO-1NC	ALN22211DN*		
	ALN2			24V AC/DC	2N0	ALN22220DN*		
APEM	AOLN2				2NC	ALN22202DN*	R	
					1NO-1NC	ALN21611DN*	G	
Switches & Pilot Lights			Momentary	100/110V AC	2N0	ALN21620DN*	Y A	
Control Boxes					2NC	ALN21602DN*	_ S	
					1NO-1NC	ALN22611DN*	PW	
Emergency Stop Switches				200/220V AC	2N0	ALN22620DN*		
Enabling	(24VAC/DC)	BA9S			2NC	ALN22602DN*		
Switches		DAJO			1NO-1NC	AOLN22211DN*	_	
Safety Products				24V AC/DC	2N0	AOLN22220DN*	_	
Explosion Proof					2NC	AOLN22202DN*	R	
					1NO-1NC	AOLN21611DN*	G Y	
Terminal Blocks			Maintained	100/110V AC	2N0	AOLN21620DN*	– A	
Relays & Sockets					2NC	AOLN21602DN*	S	
Circuit	With transformer				1NO-1NC	AOLN22611DN*	PW	
Protectors	With transformer (100/110V AC)			200/220V AC	2N0	AOLN22620DN*	_	
Power Supplies					2NC	AOLN22602DN*		
ED Illumination	Extended with Half Shroud ALGN2			0.011.0.0	1NO-1NC	ALGN22211DN*	-	
LED Illumination	AOLGN2			24V AC/DC	2N0	ALGN22220DN*		
Controllers					2NC	ALGN22202DN*	R G	
Operator			Moreontowy	100/110// 40	1NO-1NC	ALGN21611DN*	- Y	
Interfaces			Momentary	100/110V AC	2N0	ALGN21620DN*	- A	
Sensors					2NC	ALGN21602DN*	S PW	
AUTO-ID			95	200/220V AC	1NO-1NC 2N0	ALGN22611DN* ALGN22620DN*		B-315
	(24V AC/DC)				2NC	ALGN22602DN*		
	(BA9S		-	1NO-1NC	ACLGN22202DN*		
				24V AC/DC	2N0	AOLGN22220DN*	_	
Flush Silhouette				24V AC/DC	2NC	AOLGN22200DN*	R	
					1NO-1NC	AOLGN21611DN*	G	
ø16			Maintained	100/110V AC	2N0	AOLGN21620DN*	Y	
ø22					2NC	AOLGN21602DN*	_ A _ S	
					1NO-1NC	AOLGN22611DN*	PW	
ø30	With transformer			200/220V AC	2N0	AOLGN22620DN*	-	
Miniature	(100/110V AC)				2NC	AOLGN22602DN*	_	
	Extended with Full Shroud				1NO-1NC	ALFN22211DN*		
Pilot Lights	ALFN2			24V AC/DC	2N0	ALFN22220DN*		
	AOLFN2				2NC	ALFN22202DN*	R	
					1NO-1NC	ALFN21611DN*	G	
TWN			Momentary	100/110V AC	2N0	ALFN21620DN*	Y A	
					2NC	ALFN21602DN*	S	
TWND					1NO-1NC	ALFN22611DN*	PW	
ARN				200/220V AC	2N0	ALFN22620DN*		
	(24V AC/DC)	BA9S			2NC	ALFN22602DN*		
CS		DAGO			1NO-1NC	AOLFN22211DN*	_	
	and the second s			24V AC/DC	2N0	AOLFN22220DN*		
					2NC	AOLFN22202DN*	R	
					1NO-1NC	AOLFN21611DN*	G Y	
			Maintained	100/110V AC	2N0	AOLFN21620DN*	– A	
					2NC	AOLFN21602DN*	S	
					1NO-1NC	AOLFN22611DN*	PW	
	With transformer (100/110V AC)			200/220V AC	2N0	AOLFN22620DN*		
					2NC	AOLFN22602DN*		

Specify a color code in place of * in Part No. R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)
Illuminated pushbuttons have an LED lamp installed.
Round bezel (metal): Chrome-plated
See B-308 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.
Illuminated pushbuttons of 24V AC/DC or below with 2 or 4 contact blocks have a dummu block

dummy block.

Switches & P

Miniature	
Pilot Lights	

B-313

IDEC

See B-308 for other contact configurations and gold-plated silver contacts.
See B-314 for bottom view.
Terminal screws: M3.5

· Integrated terminal cover

LED Illuminated Mushroom (ø40)/Mushroom Pushlock Turn Reset/Mushroom Push Turn Lock

						Pa	ckage Quantity: 1	liet
Shape	Base	Operation	Operating Voltage	Contact	Part No. (Ordering No.)	Color Code	Dimensions Page	⁹ ilot Lights
Mushroom (ø40)				1NO-1NC	ALN32211DN *			S.
ALN3			24V AC/DC	2N0	ALN32220DN *	7		
AOLN3				2NC	ALN32202DN *	R		
				1NO-1NC	ALN31611DN *	G		APEM
		Momentary	100/110V AC	2N0	ALN31620DN *	Y A		Switches &
				2NC	ALN31602DN *	S		Pilot Lights
				1NO-1NC	ALN32611DN *	PW		Control Boxes
			200/220V AC	2N0	ALN32620DN *			Emergency
(24V AC/DC)	DAGO			2NC	ALN32602DN *			Stop Switche Enabling
	BA9S			1NO-1NC	AOLN32211DN *			Switches
			24V AC/DC	2N0	AOLN32220DN *			Safety Produc
				2NC	AOLN32202DN *	R		
				1NO-1NC	AOLN31611DN *	G		Explosion Pro
		Maintained	100/110V AC	2N0	AOLN31620DN *	Y		Terminal Bloc
				2NC	A0LN31602DN *	A S		
				1NO-1NC	AOLN32611DN *	PW		Relays & Sock
With tranformer			200/220V AC	2N0	AOLN32620DN *			Circuit
(100/110V AC)				2NC	A0LN32602DN *		B-315	Protectors
Mushroom Pushlock Turn Reset				1NO-1NC	AVLN32211DN *		D-010	Power Suppli
AVLN3 (*1)			24V AC/DC	2N0	AVLN32220DN *			LED Illuminat
				2NC	AVLN32202DN *			
				1NO-1NC	AVLN31611DN *			Controllers
	BA9S	_	100/110V AC	2N0	AVLN31620DN *	R		Operator Interfaces
				2NC	AVLN31602DN *			
				1NO-1NC	AVLN32611DN *			Sensors
			200/220V AC	2N0	AVLN32620DN *			AUTO-ID
(24V AC/DC)				2NC	AVLN32602DN *			
Mushroom Push Turn Lock				1NO-1NC	AJLN32211DN *			
AJLN3			24V AC/DC	2N0	AJLN32220DN *			
				2NC	AJLN32202DN *	– R		Flush Silhoue
				1NO-1NC	AJLN31611DN *	G		
	BA9S	—	100/110V AC	2N0	AJLN31620DN *	Y		ø16
				2NC	AJLN31602DN *	A		ø22
				1NO-1NC	AJLN32611DN *	PW		
			200/220V AC	2N0	AJLN32620DN *			ø30
(24V AC/DC)				2NC	AJLN32602DN *			Miniature

• Specify a color code in place of * in Part No. R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)

• Illuminated pushbuttons have an LED lamp installed.

• Round bezel (metal): Chrome-plated

 \bullet See <code>B-308</code> for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.

See B-308 for other contact configurations and gold-plated silver contacts.

• Illuminated pushbutttons of 24V AC/DC or below with 2 or 4 contact blocks have a

dummy block.

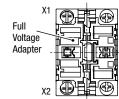
Illuminated pushbutton operation

Pushlock Turn Reset

Button is maintained when pressed and is reset when turned clockwise.

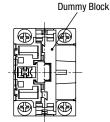
Bottom View (for illuminated pushbuttons, selector switches, and pilot lights)

6V, 12V, 24V AC/DC

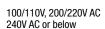


¹ contact block • See B-348 for wiring.

3 contact blocks



2/4 contact blocks





110V DC, 380V AC or over



Χ2

DC-DC converter unit Terminal No. X1: positive Terminal No. X2: negative

Switches &

Pilot Lights

TWND ARN

CS

*1) Pushlock turn reset switches cannot be used as emergency stop switches. When emergency stop switches are required, use XN or HN series emergency stop switches (ISO 13850 and IEC 60947-5-5 compliant).

Button is locked when turned clockwise in the depressed position and is reset

• Terminal screws: M3.5

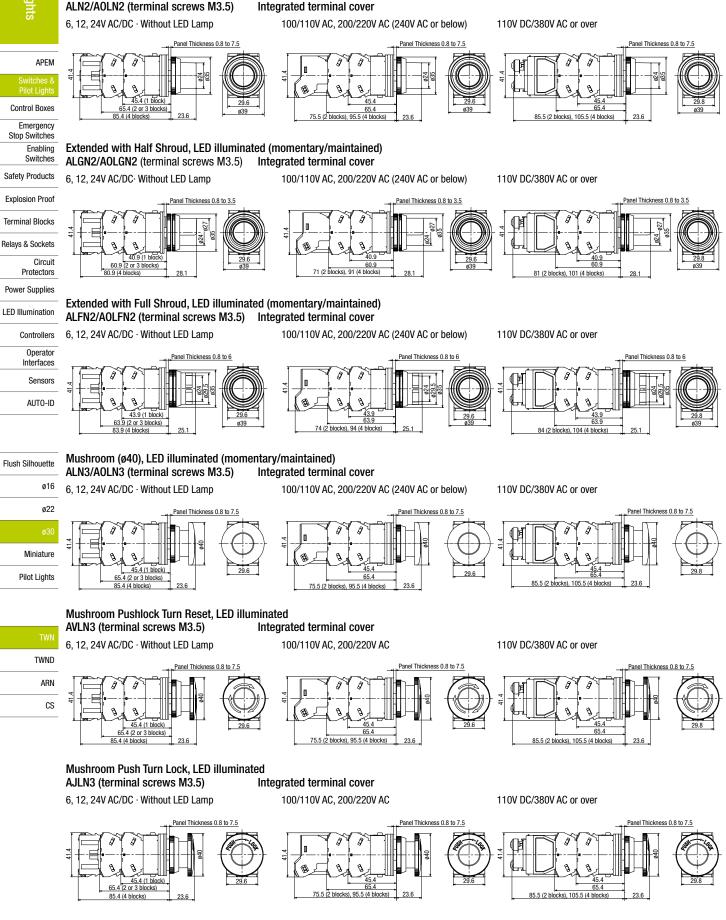
Push Turn Lock

• Integrated terminal cover

when turned counterclockwise.

IDEC

Dimensions (Illuminated Pushbuttons)



All dimensions in mm.

ASN Selector Switches	(Knob Operator)
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ight	
S	

													Package Quantity: 1	9ilot I
Shape	Knob Opera ASN	tor						ò						Pilot Lights
				_	_	_		Curies Datum	1					APEM Switches &
		Contact C	Configuratio				Maintained	Spring Return from Right		Spring) Retur	n from	Left	Pilot Lights
	Quintegat	Contact	t Block	0	Operato Positior	or on	1 2	1 2	Contact	Block		erator sition	1 2	Control Boxes
	Contact	Mounting Position	Contact	1	2				Mounting Position	Contact	1	2		Stop Switches Enabling
	1N0 (10)	0	NO	Ę		Ē.	ASN210N	ASN2110N	0	NO	•		ASN2210N	Switches
90°	(10)	2	— NO	Dun	mmy Bl	lock	+		2	— NO		— T		Safety Products
2-position	1NO-1NC (11)	① ②	NO NC	•	•	-	ASN211N	ASN2111N	0	NO NC	•	•	ASN2211N	Explosion Proof
	2N0	0	NO	-	•	\vdash	+		0	NO	•			Terminal Blocks
	(20)	() (2)	NO	<u> </u>	•	1	ASN220N	ASN2120N	2	NO	•		ASN2220N	
	, <i>.</i>	0	NO		•				0	NO	•			Relays & Sockets
	2N0-2NC	2	NC			1	ACN000N	ASN2122N	2	NC			ASN2222N	Circuit
	(22)	3	NO				ASN222N	ADIVZIZZIN	3	NO	•		ASINZZZZIN	Protectors
		4	NC	•	<u> </u>		L		4	NC		•		Power Supplies
		Contact C	Configuratio				Maintained	Spring Return from Right	Sprinç	g Return fro	om Lef	t	Spring Return Two-way	LED Illumination
		Contact	t Block	Block Operator Position		1 0 2	1 0,2		1, 02			1 0 2	Controllers	
	Contact	Mounting	Contact	1		2								Operator Interfaces
	0110	Position ①	NO	•		-								Sensors
1	2N0 (20)	 	NO	-	+1	•	ASN320N	ASN3120N		ASN32201	N		ASN3320N	AUTO-ID
1	2NC	0	NC	\vdash		L								
1	(02)	Q	NC				ASN302N	ASN3102N		ASN3202N	N		ASN3302N	
1		1	NO	•										
1	2NO-2NC	2	NO	Ē	<u> </u>	•	ASN322N	ASN3122N		ASN3222N	N		ASN3322N	Flush Silhouette
45°	(22)	3	NC	-		₽	-	AUTOTEET		AUTOLLL.			AUTOLET	10
3-position		(4)	NC	+		 								ø16
	4110	① ②	NO NO	•	'	•	-							ø22
	4N0 (40)	3	NO	•	+-	-	ASN340N	ASN3140N		ASN3240N	N		ASN3340N	ø30
	(,	 	NO		+	•	1							050
		0	NC											Miniature
	4NC	2	NC				ACNI204N	ACNOTOAN		ACN2204			ACN2204N	Pilot Lights
	(04)	3	NC				ASN304N	ASN3104N		ASN3204N	N		ASN3304N	
		4	NC			Ĺ	ļ							
		1	NO	•	<u> </u> _'	\vdash								
	☆ 3S	2	NO	 	<u> </u> _'	•	ASN33SN-243	_		_			_	TWN
	30	3	NC		•		-							
		4		Dun	mmy Bl	IOCK	<u> </u>						<u> </u>]	TWND

Knob: Black

• Round bezel (metal): Chrome-plated

Selector switches with 1 or 3 contact blocks have a dummy block.
Knob operator can be installed at 45-degree intervals in addition to the positions shown in the above table.

• See B-321 to B-322 for other contact configurations.

Turn the operator to each position accurately.

Contact Block Mounting Position

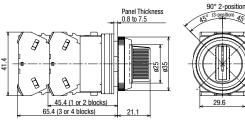


 \bullet Selector switches with \precsim have a half contact operating current (load switching ARN current value). Rated insulation voltage and rated current remain the same. CS

See B-308 for gold-plated silver contacts.
See B-312 for bottom view.

Dimensions





45

Terminal Screws: M3.5

Terminal cover: integrated

IDEC

B-316

ø30 TWN Series

Shape

Lever Operator ASN□L

ASN-🗆 Selector Switches (Lever Oper	rator)	

APEM								-						
Switches & Pilot Lights			Contact C	Configuratio	n			Maintained	Spring Return from Right		Spring	Return	from Le	eft
Control Boxes			Contact	Block) perate Positio		1 2	1 _ 2	Contact	Block	Oper Posi		1. 2
Stop Switches Enabling		Contact	Mounting Position	Contact	1	2				Mounting Position	Contact	1	2	
Switches		1N0	1	NO		•		ACNOL10N	ACN011 10N	1	NO	•		ACNODI 10N
afety Products	90°	(10)	2		Dun	nmy B	lock	ASN2L10N	ASN21L10N	2	—	_	_	ASN22L10N
plosion Proof	2-position	1NO-1NC	1	NO				ASN2L11N		0	NO			ASN22L11N
		(11)	2	NC				ASNZLTIN	ASN21L11N	2	NC		۲	ASINZZETTIN
rminal Blocks		2N0	1	NO		•		ASN2L20N	ASN21L20N	0	NO	•		ASN22L20N
ays & Sockets		(20)	2	NO		•		ASINZLZUN	ASINZTLZUN	2	NO	•		ASINZZLZUN
			1	NO						1	NO	•		
Circuit Protectors		2N0-2NC	2	NC				ASN2L22N	ASN21L22N	2	NC			ASN22L22N
		(22)	3	NO		•		AGNZLZZN	ASINZTLZZIN	3	NO	•		AGINZZLZZIN
ower Supplies			4	NC						4	NC			
D Illumination			Contact C	Configuratio	n			Maintained	Spring Return from Right	Sprir	ıg Return fr	om Left	t	Spring Return Two-way
Controllers Operator			Contact	Block) Positio		1 0 2	1 0 2			2		
Interfaces		Contact	Mounting Position	Contact	1	0	2	\bigvee			\bigvee			
0013013		2N0	0	NO	•									
AUTO-ID		(20)	2	NO	-		•	ASN3L20N	ASN31L20N		ASN32L20	N		ASN33L20N
		2NC	0	NO										
		(02)	2	NO				ASN3L02N	ASN31L02N		ASN32L02	2N		ASN33L02N
			1	NO	•									
ush Silhouette		2N0-2NC	2	NO										
	45°	(22)	3	NO				ASN3L22N	ASN31L22N		ASN32L22	2N		ASN33L22N
ø16	3-position		4	NO										
ø22			1	NO	٠									
		4N0	2	NO				ASN3L40N	ASN31L40N			N.		
ø30		(40)	3	NO				ASN3L40N	ASIN3 IL40IN		ASN32L40	JIN		ASN33L40N
Miniature			4	NO										
			1	NO										
Pilot Lights		4NC	2	NO				ASN3L04N	ASN31L04N			IN		ASN33L04N
		(04)	3	NO				ASINGLU4IN	ASING ILU4IN		ASN32L04	FEN		ASINS3LU4IN
			4	NO										
			0	NO	٠									
TWN		☆ 3S	2	NO				☆ ASN3L3SN-243						
THUS		აა	3	NO				ASN3L3SN-243	_		_			_
TWND			4	_	Dun	nmy B	lock							

ARN · Lever: Black

CS

• Round bezel (metal): Chrome-plated

• Selector switches with 1 or 3 contact blocks have a dummy block.

. Knob operator can be installed at 45-degree intervals in addition to the positions shown in the above table.

• See B-321 to B-322 for other contact configurations.

Turn the operator to each position accurately.

Contact Block Mounting Position



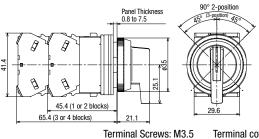
 \bullet Selector switches with \precsim have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.

• See **B-308** for gold contact. • See B-312 for bottom view.

Dimensions

All dimensions in mm.

Package Quantity: 1



Terminal cover: integrated

B-317

ASN- K Key Selector Switches

Package Quantity: 1

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2	100
ģ	×
	Pilo+
Light	linht

Key Selector (Key No. 0)

Г

Shape	Key Selector ASN⊡K	r (Key No. 0)												Lights
														APEM
		Contact C	configuratio	n			Maintained	Spring Return from Right		Spring	Return	n from L	_eft	Switches & Pilot Lights
		Contact	Block		Operato Positio		1 2	1 2	Contact	Block		erator sition	1, 2	Control Boxes
	Contact	Mounting Position	Contact	1	2			\sim	Mounting Position	Contact	1	2		Emergency Stop Switches Enabling
	1N0	0	NO		•			ASN21K10N	0	NO	٠		ACN22K10N	Switches
90°	(10)	2	—	Dur	mmy B	lock	ASN2K10N	ASINZIKIUN	2	—	-	<u> </u>	ASN22K10N	Safety Products
2-position	1NO-1NC	1	NO		•		ASN2K11N	ASN21K11N	0	NO	•		ASN22K11N	Explosion Proof
	(11)	2	NC	•	<u> </u>		AGAZATIA	AUNEINTIN	2	NC		•	RONLENTIN	
	2N0	0	NO		•		ASN2K20N	ASN21K20N	0	NO	•		ASN22K20N	Terminal Blocks
	(20)	2	NO		•				2	NO	•			Relays & Sockets
		0	NO NC		•				0	NO NC	•		-	Circuit
	2NO-2NC (22)	2 3	NO	•	•		ASN2K22N	ASN21K22N	2 3	NO	•	•	ASN22K22N	Protectors
	(22)	3 ④	NC	•					3	NC	-	•	-	Power Supplies
			configuratio				Maintained	Spring Return from Right		g Return fro	om Lef		Spring Return Two-way	LED Illumination
		Contact	Block	(Operate	or								Controllers
	Contact	Mounting	Contact	1	Positio	n 2								Operator Interfaces
	010	Position ①	NO	•										Sensors
	2N0 (20)	 	NO	-	+	•	ASN3K20N	ASN31K20N		ASN32K20	N		ASN33K20N	AUTO-ID
	2NC	0	NC					A0N04//00N			•••		40N00K00N	
	(02)	2	NC				ASN3K02N	ASN31K02N		ASN32K02	N		ASN33K02N	
		1	NO		Ţ									
	2N0-2NC	2	NO		<u> </u>	•	ASN3K22N	ASN31K22N		ASN32K22	N		ASN33K22N	Flush Silhouette
45°	(22)	3	NC				A CHOREEN	, iono martin					Noncontern	ø16
3-position		4	NC											
		0	NO NO	•	─		-							ø22
	4N0 (40)	2 3	NO NO	•		•	ASN3K40N	ASN31K40N		ASN32K40	N		ASN33K40N	ø30
	(40)	3 ④	NO	-		•								
		(†) (1)	NC											Miniature
	4NC	 ②	NC								_			Pilot Lights
	(04)	3	NC	<u> </u>			ASN3K04N	ASN31K04N		ASN32K04	N		ASN33K04N	
		4	NC											
		1	NO		1									
	s S S	2	NO] ☆							TWN
	50	3	NC				ASN3K3SN-243			_			_	TWND
		4	—	Dur	mmy B	lock								
Cylinder: Chi	rome-plated						• k	Key selector switch is s	upplied with ty	vo standard	kevs			ARN

Cylinder: Chrome-plated
Round bezel (metal): Chrome-plated

Key selector switches with 1 or 3 contact blocks have a dummy block.
See B-321 to B-322 for other contact configurations.

 On spring-returned types, the key can be released only from the maintained position. On maintained types, the key can be released from every position. See B-308 for specifying key retained positions.

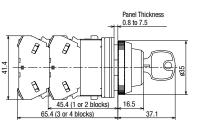
Contact Block Mounting Position



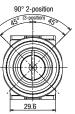
Key selector switch is supplied with two standard keys.
(1) Insert the key completely before turning the key, otherwise failure may result.
(2) Turn the operator to each position accurately.

- b)Ifferent key number is available upon request. Contact IDEC.
 Selector switches with A have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
- See B-308 for gold-plated silver contacts.
 See B-312 for bottom view.

Dimensions







Terminal Screws: M3.5

Terminal cover: integrated

CS

ø30 TWN Series

ASN- K Key Selector Switches

Package Quantity: 1

Key Selector (Key No. 24401) ASN□K

APEM	
Switches & Pilot Lights	
Control Boxes	
Emergency Stop Switches	
Enabling Switches	
Safety Products	
Explosion Proof	
Terminal Blocks	
Relays & Sockets	
Circuit Protectors	
Power Supplies	
LED Illumination	
Controllers	
Operator Interfaces	
Sensors	
AUTO-ID	
Flush Silhouette	
ø16	
ø22	
ø30	
Miniature	
Pilot Lights	
TWND	
ARN	•

Shape							Ø					
		Contact C	onfiguratio	n		Maintained	Spring Return from Right		Spring	g Retur	n from	Left
	Contract	Contact	Block		perator Position	1 2	1 2	Contact	Block	rator ition	1 2	
	Contact	Mounting Position	Contact	1	2			Mounting Position	Contact	1	2	
	1NO (10)	0	NO			ASN2K10N- N024401	ASN21K10N- N024401	0	NO	•		ASN22K10N- N024401
90°	. ,	2		Dun	nmy Block			2	—	-		
2-position	1NO-1NC (11)	① ②	NO NC	•	•	ASN2K11N- N024401	ASN21K11N- N024401	0	NO NC	•		ASN22K11N- N024401
	. ,	0	NO	-	•			2		•	•	
	2N0 (20)	 	NO		•	ASN2K20N- N024401	ASN21K20N- N024401		NO NO	•		ASN22K20N- N024401
	(20)	0	NO		•	1024401	1024401	2	NO	•		11024401
	010 010	 	NC	•	•	4010/001	40104//001	① ②	NC	•	•	401001/0011
	2NO-2NC (22)	3	NO	-	•	ASN2K22N- N024401	ASN21K22N- N024401	3	NO	•	-	ASN22K22N- N024401
	(22)	 	NC	•		1024401	1024401	(4)	NC	•	•	1102-1101
		. –	onfiguratio			Maintained	Spring Return from Right		g Return fro	om Lef		Spring Return Two-way
	Contact	Contact	Block		perator Position	1 0 2						
	CUIIIdGI	Mounting Position	Contact	1	0 2				\bigvee			\bigvee
	2N0	1	NO			ASN3K20N-	ASN31K20N-	l A	ASN32K201	N-		ASN33K20N-
	(20)	2	NO			N024401	N024401	1	1024401			N024401
	2NC	1	NC			ASN3K02N-	ASN31K02N-		ASN32K021	N-		ASN33K02N-
	(02)	2	NC			N024401	N024401	1	024401			N024401
		0	NO	•		-						
	2N0-2NC	2	NO			ASN3K22N-	ASN31K22N-		SN32K22	N-		ASN33K22N-
45°	(22)	3	NC			N024401	N024401		024401			N024401
3-position		4	NC									
		0	NO	•		-						
	4N0	2	NO		•	ASN3K40N-	ASN31K40N-		SN32K401	N-		ASN33K40N-
	(40)	3	NO	•		N024401	N024401	r r	024401			N024401
		(4) (1)	NO NC		•							
	410	-	NC									
	4NC (04)	2	NC			ASN3K04N- N024401	ASN31K04N- N024401		\SN32K04 \024401	N-		ASN33K04N- N024401
	(04)	3	NC			11024401	11024401		1024401			11024401
		(4)	-									
		0	NO	•		-						
	☆	2	NO		•	ASN3K3SN-			_			_
	3S	3	NC	D		243-N024401						
		4		un _ו	nmy Block							

• Cylinder: Chrome-plated

CS

• Round bezel (metal): Chrome-plated

• Key selector switches with 1 or 3 contact blocks have a dummy block.

• See B-321 to B-322 for other contact configurations.

 On spring-returned types, the key can be released only from the maintained position. On maintained types, the key can be released from every position. See B-308 for specifying key retained positions.

Contact Block Mounting Position

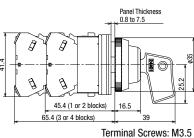
4

• Key selector switch is supplied with two standard keys.

(1) Insert the key completely before turning the key, otherwise failure may result. (2) Turn the operator to each position accurately.

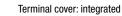
- Different key number is available upon request. Contact IDEC.
- Selector switches with 3 have a half contact operating current (load switching
- current value). Rated insulation voltage and rated current remain the same. • See B-308 for gold-plated silver contacts.
- See B-312 for bottom view.

Dimensions



All dimensions in mm.





ASLN Illuminated Selector Switches (LED)

Shape Single and the second particle of the second partex second partex second particle of the second particle of the s		Package Quantity: 1												Pilot		
(24 V C/DC) Spring Return from Left Contact Configuration Return from Right Contact Configuration Return from Right Contact Configuration Contact Configuration <th< td=""><td>Shape</td><td></td><td>d Selector</td><td>Switches</td><td>(BA9S</td><td>Bas</td><td>e)</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Pilot Lights</td></th<>	Shape		d Selector	Switches	(BA9S	Bas	e)	1								Pilot Lights
Unclusted Contact Configuration Maintained Spring Return from Left from Right in from Right in from Right in from Right in the Spring Return from Left Contact Block Operator Position Status 12200000000000000000000000000000000000								(24V AC/DC)								
Understand Contact Block Operator Position Raded Voltage 1 2 1 2 Contact Block Operator Position Control Bools			Contact C	onfiguratio	on			Maintained			Spring	g Reti	urn fro	om Left		
United: Mounting Contact 1 2 Contact Contact Configuration Askin316200h: Askin31620h: Contact Configuration Contact Configuration Maintained Spring Return from Right Spring Return from Left Spring Return from Right Contact Configuration Maintained Spring Return from Right Spring Return from Right Spring Return from Right Contact Configuration		Contact	Contact	t Block				1 2	1 2					1. 2		
Sign for the form of the form o		Contact	Position	Contact				\sim		Position	CUIILAUL		2			Stop Switches
B 2N0 0 N0 424/AC/DC ASLN222220N+ ASLN222220N+ 200/20VAC 0 ASLN222220N+ ASLN221620DN+ 200/220VAC 0 ASLN222220N+ ASLN221620DN+ ASLN222220N+ ASLN322220N+ ASLN322220N+ ASLN322220N+ ASLN322220N+ ASLN322600N+ ASLN322600N+ AS	ition	1NO-1NC				4										
B 2N0 0 N0 424/AC/DC ASLN222220N+ ASLN222220N+ 200/20VAC 0 ASLN222220N+ ASLN221620DN+ 200/220VAC 0 ASLN222220N+ ASLN221620DN+ ASLN222220N+ ASLN322220N+ ASLN322220N+ ASLN322220N+ ASLN322220N+ ASLN322600N+ ASLN322600N+ AS	sod		<u> </u>	NC						2	NC		•			Safety Products
Image: Contact Configuration Rated Voltage Image: Contact Configuration AstIN3122CODN+ AstIN3122CODN+ Contact Configuration AstIN3122Contact AstIN322CODN+ AstIN3122CODN+ Contact Configuration AstIN3122Contact AstIN322CODN+ AstIN3122CODN+ Contact Configuration As	° 2-									-	NO					= · · · D - · f
(20) (20) <th< td=""><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td>-</td><td>-</td><td></td><td></td><td>Explosion Proot</td></th<>	6									-		-	-			Explosion Proot
U Distriction Distristin distriction Distriction		(20)														Terminal Blocks
2N0-2NC 0 NC 0 0 ASLN21622DN* ASLN211622DN* Q NC ASLN221622DN* ASLN221622DN* ASLN221622DN* ASLN221622DN* ASLN222622DN* ASLN222622DN* ASLN222622DN* ASLN221622DN* ASLN221622DN* ASLN22622DN* ASLN222622DN* ASLN22622DN* ASLN32622DN* ASLN32622DN* ASLN32622DN* ASLN32622DN* ASLN3262DN* ASLN3362DN* ASLN3362DN* ASLN3362DN* ASLN3362DN* ASLN33262DN* ASLN332		├ ──+	(1)	NO		<u></u>				1	NO				S	
(22) (2) <td></td> <td>2NO-2NC</td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u> </u></td> <td>•</td> <td></td> <td></td> <td>Relays & Sockets</td>		2NO-2NC				1						<u> </u>	•			Relays & Sockets
Image: Contact Configuration Image: Contact Configuration Rated Voltage Spring Return from Right Spring Return from Left Spring Return				NO		ノ										
Image: contact connegrator Maintained from Right Spring Return from Leit Two-Way Color Contact Contact Block Operator Position Notage 1 0 2 1 0				NC		1	_		[<u></u> '							Protectors
Image: Contact Block Operator Position Rated Voltage 1 2 1 0 2 1 <th1< th=""> 1 0</th1<>			Contact Co	onfiguratio	on			Maintained		Spring	, Return fr	rom Lo	eft			
Contact Mounting Position Contact 1 0 2 Controllers Operator Interfaces 2N0 (20) 0 N0 24V AC/DC ASLN32220DN* ASLN322220DN* ASLN332220DN* ASLN332620DN* ASLN332620DN* ASLN332620DN* ASLN332620DN* ASLN332620DN* ASLN32202DN* ASLN332602DN* ASLN32202DN* ASLN332602DN* ASLN332622DN* ASLN332622DN* ASLN332622DN* ASLN332622DN* ASLN332622DN* ASLN332622DN* ASLN332622DN* AS			Contact	t Block				1 0 2	1 0 2		1,0	2		1,0,2		
Image: Section of the sectio		Contact		Contact					\bigvee							
VIO (20) ② NO IO0/110V AC ASLN31620DN* ASLN321620DN* ASLN331620DN* ASLN331620DN* ASLN332620DN* ASLN332602DN* ASLN331602DN* ASLN331602DN* ASLN332602DN* ASLN332604DN* ASLN3326		010	0			T		ASLN32220DN*	ASLN312220DN*	ASL	N322220)DN*		ASLN332220DN*		
Image: construction Image: construction Construction <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>100/110V AC</td><td></td><td>ASLN311620DN*</td><td>ASL</td><td>_N321620</td><td>)DN*</td><td></td><td>ASLN331620DN*</td><td></td><td>Sensors</td></th<>							100/110V AC		ASLN311620DN*	ASL	_N321620)DN*		ASLN331620DN*		Sensors
Line 2 NC 100/110V AC ASLN31602DN* ASLN321602DN* ASLN331602DN* ASLN332602DN* ASLN331602DN* ASLN331602DN* ASLN331602DN* ASLN331602DN* ASLN331602DN* ASLN331602DN* ASLN332602DN* ASLN331602DN* ASLN331604DN* ASLN331604DN* ASLN331604DN* ASLN331604DN* ASLN332604DN* ASLN332604DN* ASLN332604DN* ASLN331604DN* ASLN331604DN* ASLN332604DN* ASLN332604DN		(20)						ASLN32620DN*		ASL	_N322620)DN*		ASLN332620DN*		
OPE (02) (2) NC (00/110VAC ASLN31602DN* ASLN31602DN* ASLN331602DN* ASLN331602DN* ASLN331602DN* ASLN331602DN* ASLN331602DN* ASLN332602DN* ASLN332602DN* ASLN332602DN* ASLN332602DN* ASLN332602DN* ASLN332602DN* ASLN332602DN* ASLN332602DN* ASLN332622DN* ASLN332640DN* ASLN332604DN* ASLN332604DN* ASLN332604DN* ASLN332604DN* ASLN332604DN* ASLN332604DN*		2NC				Þ										AUTO-ID
En 2NO-2NC (22) Q NO Image: NO	tior		2	NC												
En 2NO-2NC (22) Q NO Image: NO	posi		<u> </u>													
(22) (3) NC (4) (20)/220VAC ASLN32622DN* ASLN322622DN* ASLN32622DN* ASLN32640DN* ASLN322240DN* ASLN332240DN* ASLN332240DN* ASLN332240DN* ASLN332240DN* ASLN332240DN* ASLN332240DN* ASLN332240DN* ASLN332240DN* ASLN332640DN* ASLN332640DN* ASLN332640DN* ASLN332640DN* ASLN332640DN* ASLN332640DN* ASLN332640DN* ASLN332640DN* ASLN3322640DN* ASLN332640DN* ASLN332604DN* ASLN332640DN* ASLN332604DN* ASLN332640DN* ASLN332604DN* Miniature Min	ι ά			-		+										
Image: Product state Image: Pr	45			-	\vdash	₽										Flush Silhouette
Image: No Image: No <thimage: no<="" th=""> Image: No <thimage: no<="" th=""> Image: No Image: No</thimage:></thimage:>		(22)		-	-	+	200/220V AU	ASLN32622DIN*	ASLN312022DIN*	Aol	. <u>N322022</u>	<u>'UN*</u>		ASLN332022UN*		
4NO (40) 0 0 0/110VAC ASLN31640DN* ASLN31640DN* ASLN331640DN* ASLN331640DN* ASLN331640DN* ASLN331640DN* ASLN331640DN* ASLN332640DN* 022 3 N0 0 200/220V AC ASLN32640DN* ASLN311640DN* ASLN322640DN* ASLN332640DN* ASLN332640DN* 022 3 N0 0 - - - - - 030 4NC 0 NC 0 - - - - - 030 4NC 0 NC 0 - - - - - 030 0 022 030 0 030 0 <t< td=""><td></td><td>├───┤</td><td></td><td></td><td></td><td>+</td><td></td><td></td><td>ACL N2122/0DN*</td><td></td><td></td><td>אחר.</td><td></td><td>ACI N2222/0DN*</td><td></td><td>ø16</td></t<>		├ ───┤				+			ACL N2122/0DN*			אחר.		ACI N2222/0DN*		ø16
(40) ③ NO ● 200/220V AC ASLN32640DN* ASLN322640DN* ASLN332640DN* ASLN332640DN* ASLN332640DN* ASLN332640DN* ASLN332640DN* ASLN332640DN* ASLN332640DN* ASLN32640DN* ASLN332604DN* Miniature Miniature Miniature Pilot Lights		4NO				+										a99
④ NO ● — — — — [030] 40 NC ● 24V AC/DC ASLN32204DN* ASLN322204DN* ASLN332204DN* ASLN332204DN* ASLN332204DN* ASLN332204DN* Miniature 4NC ② NC ● 100/110V AC ASLN31604DN* ASLN321604DN* ASLN331604DN* Pilot Lights (04) ③ NC ● 200/220V AC ASLN32604DN* ASLN322604DN* ASLN332604DN* Pilot Lights <td></td> <td></td> <td></td> <td>++</td> <td></td> <td>+</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td>				++		+										-
Image: NC Image: NC <t< td=""><td></td><td>1</td><td></td><td></td><td>Ť</td><td>•</td><td></td><td></td><td></td><td></td><td></td><td>/bre</td><td></td><td></td><td></td><td>ø30</td></t<>		1			Ť	•						/bre				ø30
4NC ② NC IO0/110V AC ASLN31604DN* ASLN321604DN* ASLN331604DN* Miniature (04) ③ NC Image: Constraint of the second se						\pm			ASLN312204DN*	ASI	N32220/	4DN*		ASLN332204DN*		
(04) ③ NC 🗰 200/220V AC ASLN32604DN* ASLN312604DN* ASLN322604DN* ASLN332604DN* Pilot Lights		\vdash	0	NC	' (24V A0/D0	AOLINOLLOTDIN								
		4NC	2	NC		T_	100/110V AC				N321604	IDN*		ASLN331604DN*	1	Miniature
			2	NC NC		Ţ	100/110V AC	ASLN31604DN*	ASLN311604DN*	ASL						

• Specify a color code in place of * in Part No.

R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)

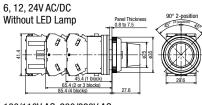
• Illuminated selector switches have an LED lamp installed.

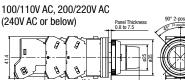
Round bezel (metal): chrome-plated
See B-309 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.
Illuminated selector switches of 24V AC/DC or below with 2 or 4 contact blocks have a dummy block.

Contact Block Mounting Position



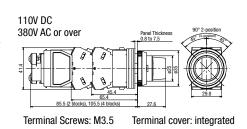
Dimensions





27

65.4 75.5 (2 blocks), 95.5 (4 blocks)



TWND

ARN

CS

All dimensions in mm.

• See B-321 to B-322 other contact configurations.

• Turn the operator to each position accurately. • See **B-309** for gold-plated silver contacts.

• See B-314 for bottom view.

ø30 TWN Series

Selector Switches Contact Configuration (90° 2-position)

) t															
Lig					Operator Operation and Circuit										
ot Lights			Cont Bloo		Maint 1	ained 2		Return Right > ²		Return Left 2					
APEM	Contact Configuration	Circuit Code	210		Knob	Kau	Knob	/	Knob	/					
Switches &	connguration				Lever	Кеу	Lever	Key	Lever	Key					
Pilot Lights					Operator	Position	Operator	Position	Operator	Position					
Control Boxes			Mounting	Contact	1	2	1	2	1	2					
Emergency Stop Switches			Position			Ø	l 🛞	Ø		Ø					
Enabling	10	Not	0	NO		●		●	•						
Switches	10	required	2		Dumm	y Block	Dumm	y Block	Dumm	y Block					
Safety Products	01	Not	1	NC	•		•			•					
Explosion Proof	01	required	2	—	Dumm	y Block	Dumm	y Block	Dumm	y Block					
		☆	1	EM											
Terminal Blocks	2B	118	2	LB											
Relays & Sockets	28	자	1	EM											
Circuit		168	2	LB											
Protectors															

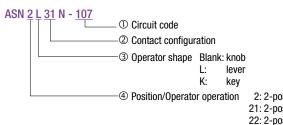
Power Supplies							Op	perator 0	peration	and Circ	uit						
					N	laintaine	ed		ring Reti			ring Ret					
LED Illumination			Contact 1 2 1 - 2								1	from Left					
Controllers			Conta Bloc				2		$\mathbf{\nabla}$	2			2				
Operator Interfaces	Contact Configuration	Circuit Code			Knob Lever	Key	Illumi- nated	Knob Lever	Key	Illumi- nated	Knob Lever	Key	Illumi- nated				
Sensors																	
AUTO-ID			Mounting		Uper 1	rator Po	2	Uper 1	rator Pos	2	Uper 1	rator Pos	2				
			Position	Contact	Ś		Ø	-		Ď	, second		Ś				
	11	Not	1	NO			•			•	•						
Flush Silhouette		required	2	NC	•			•					•				
	20	Not	1	NO			•			•	•						
ø16	20	required	2	NO			•			•	•						
ø22	02	Not	1	NC	•			•					•				
		required	2	NC	•			•					•				
ø30			1	NO			•			•	•						
Miniature	22	Not	2	NC	•			•					•				
		required	3	NO			•			•	•						
Pilot Lights			4	NC	•			•					•				
			0	NC	•			•					•				
	31	107	2	NO			•			•	•						
71401	0.		3	NO			•			•	•						
TWN			4	NO			•			•	•						
TWND			1	NO			•			•	•						
	40	Not	2	NO			•			•	•						
ARN		required	3	NO			•			•	•						
CS	. O . I		<u>(4)</u>	NO			•				•						

• Selector switches with 🖄 have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.

Contact Block Mounting Position



Part No. Development



2: 2-position, maintained

21: 2-position, spring return from right 22: 2-position, spring return from left

B-321

IDEC

Switches & Pile

Selector Switches Contact Configuration (45° 3-position)

		Operator Operation and Circuit											ot Li						
Contact	Circuit Code	Cont Bloo		Operator Position			N 1	laintain 0	ed _2	Spr	ing Re om Rig	turn jht	Sp	from L 1 < 0	eturn .eft	L I	ing Re wo-wa	ıy	lot Lights
Configuration				-	0	0		\bigvee			$\overline{}$			\top	, 				APEM
		Mounting Position	Contact		0	2 ()	Knob/ Lever	Кеу	Illumi- nated	Knob/ Lever	Key	Illumi- nated	Knob/ Lever		Illumi- nated		Switches & Pilot Lights		
		0	NO		U U														Control Boxes
	202	Q	NC					V			V			V			V		Emergency
11	203	① ②	NC NO				-	\checkmark			\checkmark			\checkmark			\checkmark		Stop Switches Enabling Switches
	303	① ②	NC NO		•	•		V						V			V		Safety Products
20	Not	1	NO	•				1			V			√			√		Explosion Proof
-	required	2 1	NO NC					•			•			-					Terminal Blocks
02	Not required	0 Q	NC					\checkmark			\checkmark			V					Relays & Sockets
		0	NO	•															Circuit
	Not required	2	NO					\checkmark			\checkmark						\checkmark		Protectors
	requireu	3 ④	NC NC																Power Supplies
		0	NO	•															LED Illumination
	000	2	NC				1	,			,								
	209	3	NC]	V			V			_			_		Controllers
		4	NO			•													Operator Interfaces
		0	NC				-												Sensors
22	210	2 3	NO NC				-	\checkmark											
		 	NO				-												AUTO-ID
		0	NC		•	-													
	010	2	NO			•	1	,											
	310	3	NC		•]	V			_			_			_		Fluch Silhouatta
		4	NO			•	ļ									ļ			Flush Silhouette
		0	NO	•		•	-												ø16
	311	2	NO			•	-	\checkmark			\checkmark						\checkmark		ø22
		3 ④	NC NC				-												
		(L) (L)	NO																ø30
	Not	Q	NO	-		•	1	,			,			,			,		Miniature
40	required	3	NO	•			1	V			\checkmark						V		Dilat Liabta
		4	NO																Pilot Lights
		0	NC																
04	Not	0	NC											\checkmark					
	required	3	NC					v			v			v			v		TWN
		(4)	NC NO																
	☆	① ②	NO	-		•	-												TWND
3S	243	3	NC		•	-	1	/	_		—			—			—		ARN
		 		Di	ummy Blo	ock	-												CS

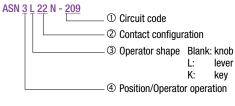
• Selector switches with 🖄 have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.

 \bullet On selector switches with \nleftrightarrow , the contact blocks may overlap each other while turning the ring or lever operator.

Contact Block Mounting Position



Part No. Development



3: 3-position, maintained

31: 3-position, spring return from right

32: 3-position, spring return from left

33: 3-position, spring return two-way

IDEC

Switches & Pi

ASBN2 Selector Pushbuttons

liot Lights		Í		1		1	Ding	Desition			
igh				0	teet		King P	Position	Right		
ts	Shape	Contact Configuration	Circuit Code	Con Blo		Left	\bigcirc			Button Color Code	Ring Operator
APEM				Mounting Position	Contact	Normal		button Normal F	Push	0000	Part No. (Ordering No.)
Switches & Pilot Lights	Ring Operator (90°2-position)		100	0	NO		•		•		
Control Boxes	ASBN2		A03	2	NC						ASBN211N-A03*
Emergency		11	\$	1	NC					В	☆
Stop Switches		(1NO-1NC)	K04	2	EM		●			G	ASBN211N-K04*
Enabling			G03	0	NO		•	В	locked	R Y	ASBN211N-G03*
Switches				2	NC	•		•		T	
Safety Products		20	D01	0	NO		•		_		ASBN220N-D01*
Explosion Proof		(2NO)		2	NO				•		
Terminal Blocks	1			0	NO		•		•		
Terminal Blocks			A08	2	NC	•					ASBN222N-A08*
Relays & Sockets				3 4	NO NC	•	•		•		
Circuit				(4) (1)	NO		•		•		
Protectors				 ②	NO		•		•		
Power Supplies			☆ C10	3	NC	•			-		☆ ASBN222N-C10∗
LED Illumination			010	4	NC						AUDIAZZZIN UTU
				0	NO		•				
Controllers				2	NO				•		
Operator Interfaces			D10	3	NC	•					ASBN222N-D10*
				4	NC			•			
Sensors				0	NO		۲			В	
AUTO-ID		22	\$	2	NO					G	☆
		(2N0-2NC)	E10	3	NC					R	ASBN222N-E10*
				4	NC					Y	
				0	NO				•		
Flush Silhouette			☆	2	NO		•				\$
ø16			F10	3	NC			•			ASBN222N-F10*
				4	NC	•					
ø22				0	NO		•	<u> </u>			
ø30			G10	2	NO		•	В	locked		ASBN222N-G10*
Miniature				3	NC NC	•		•			
wiiniatule				(4) (1)		•		•			
Pilot Lights				 	NC NC	•		$\left \right $			
			☆ K15	3	EM		•				☆ ASBN222N-K15∗
			NIJ	(3) (4)	EM		•				
	Specify a color code in place of * i	Dout No.		•			-				

• Specify a color code in place of * in Part No.

B (black), G (green), R (red), Y (yellow)

• Bezel (metal): Chrome-plated

TWND

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• Circuit code G: The pushbutton does not operate when the ring operator is turned to the right position.

• Circuit codes E and F: The right and left NC contact blocks on circuit code E or F may overlap each other while turning the ring operator. The NO and NC contact blocks on circuit code F may overlap each other while pressing the button.

• When using the selector pushbutton, do not turn the ring operator with the pushbutton depressed. Otherwise, damage or failure may be caused.

• Selector switches with 🖄 have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.

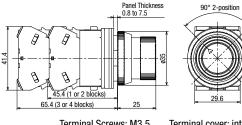
• See B-312 for bottom view.

Contact Block Mounting Position





(All dimensions in mm.)



Terminal Screws: M3.5

Terminal cover: integrated

ø30 TWN Series

ower Supplies

LED Illumination

Controllers Operator

Interfaces

Sensors AUTO-ID

Flush Silhouette ø16 ø22 Miniature Pilot Lights

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TWND	
ARN	
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Pilot Lights Round	, Square Extended,	Rectangular (Marking)
---------------------------	--------------------	-----------------------

						Pa	ackage Quantity: 1	liot
Shape	Illumination	Base	Rated Voltage	Part No. (Ordering No.)	Color Code	LED Lamp Part No.	Dimensions Page	Pilot Lights
Round APN1			24V AC/DC	APN122DN*	R, G, Y, A, S, PW	LSRD-2		
			100/110V AC	APN116DN*	R, G, Y, A, S, PW			
(24V AC/DC)	LED	BA9S	200/220V AC	APN126DN*	R, G, Y, A, S, PW	LSRD-6		APEM Switches & Pilot Lights
Square Extended UPQN3B			24V AC/DC	UPQN3B22D*	R, G, Y, A, S, PW	LSRD-2	-	Control Boxes
		BA9S					 B-325	Emergency Stop Switches
	LED		100/110V AC	UPQN3B16D*	R, G, Y, A, S, PW	LSRD-6		Enabling Switches
(24V AC/DC)			200/220V AC	UPQN3B26D*	R, G, Y, A, S, PW			Safety Products
Rectangular (Marking)			24V AC/DC			LSRD-2	-	Explosion Proof
UPQN4			24V AG/DG	UPQN422D*	R, G, Y, A, S, PW	Lond-2	_	Terminal Blocks
	LED	BA9S	100/110V AC	UPQN416D*	R, G, Y, A, S, PW			Relays & Sockets
			200/220V AC	UPQN426D*	R, G, Y, A, S, PW	LSRD-6		Circuit Protectors
(24V AC/DC)						<u> </u>		Power Supplies

• Specify a color code in place of * in Part No.

R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)

• Round bezel (metal): chrome-plated

• Square bezel (metal): chrome-plated

• Pilot lights have an LED lamp installed.

• See B-346 for the marking plate size of rectangular pilot lights.

• See B-309 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.

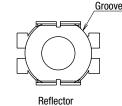
• Terminal cover is installed on pilot lights for electric shock prevention.

Туре	Terminal Cover	Quantity							
6V, 12V, 24V AC/DC	APN-PVL	1							
100V/110V AC, 200/220V AC	N-VL3	1							
110V DC	N-VL3	1							

Note: DC-DC converter types are not approved by UL and CSA, and not CE compliant. • See B-314 for bottom view.

Reflector

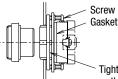
- 1. The lamp housing of the square LED illuminated pilot lights has a built-in reflector.
- 2. Make sure that the reflector does not fall off when removing the lens or making plate.
- 3. When replacing the LED lamp of UPQN4 (rectangular), use a lamp holder tool (OR-55).
- 4. To remove the reflector, insert a flat screwdriver inside the groove of the reflector and lightly push out.



Panel Mounting of Square Pilot Lights

1. Tighten the square bezel to the operator and position the bezel correctly. 2. Lightly tighten the screw to secure the pilot light on the panel.

3. After tightening, do not turn the square bezel, otherwise it may fall off.

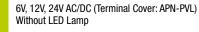


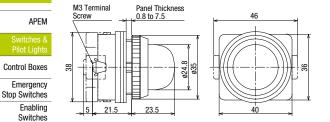
Tighten the screw lightly so that the panel does not bend. Recommended tightening torque: 0.15 Nm

ø30 TWN Series

Dimensions (Pilot Light)

Round APN1





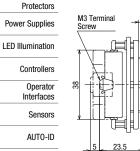
Terminal screws: M3

Square Extended **UPQN3B**



Panel Thickness 0.8 to 3.2

0.25



20

Terminal screws: M3

ŝ 52.5

46

4(

4

46

36

40 44

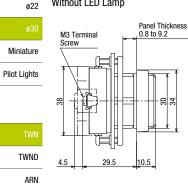
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36

Terminal screws: M3

Rectangular (Marking) UPQN4

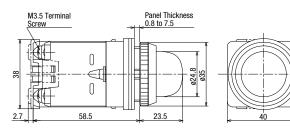
6V, 12V, 24V AC/DC (Terminal Cover: APN-PVL) Without LED Lamp



CS

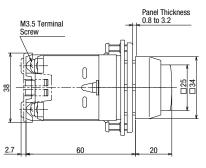
• See B-349 for wiring.

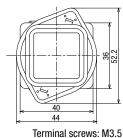
100 to 480V AC, 110V DC (Terminal Cover: N-VL3)



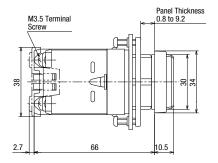
Terminal screws: M3.5

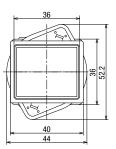
100 to 480V AC, 110V DC (Terminal Cover: N-VL3)





100 to 480V AC, 110V DC (Terminal Cover: N-VL3)





Terminal screws: M3.5

Pilot L

Safety Products

Explosion Proof

Terminal Blocks

Flush Silhouette

ø16

Switches & Pi

Flush/Extended/Extended with Half Shroud/Extended with Full Shroud

						Package Quantity: 1	liot
Shape	Operation	Contact	Part No. (Ordering No.)	Button Color Code	Dimensions	(All dimensions in mm.)	^p ilot Lights
Flush ABD1		1N0	ABD110N*	В			
ABD1 AOD1		1NC	ABD101N*	G R			
	Momentary	1NO-1NC	ABD111N*	к Y			APEM
-	mornoritary	2N0	ABD120N*	S	Pa 	nel Thickness 8 to 7.5 ø39	Switches &
		2NC	ABD102N*	W			Pilot Lights
		2NO-2NC	ABD122N*	Note			Control Boxes
		1N0	AOD110N*	B			Emergency
		1NC	AOD101N*	G R	45.4 (1 or 2 blocks)	29.4	Stop Switches
	Maintained	1NO-1NC	AOD120N+	Y	65.4 (3 or 4 blocks) 9		Enabling Switches
		2N0	AOD120N*	S			Safety Products
		2NC 2N0-2NC	A0D102N*	W Note			
Extended		2NU-2NC 1NO	AOD122N* ABD210N*				Explosion Proof
ABD2		1NC	ABD210N* ABD201N*	В			Terminal Blocks
A0D2		1NO-1NC	ABD201N* ABD211N*	G R			
	Momentary	2N0	ABD211N* ABD220N*	. к Y	Pa	nel Thickness	Relays & Sockets
		2NC	ABD220N*	S	TIT	8 to 7.5	Circuit
		2NO-2NC	ABD202N*	W			Protectors
		1N0	AOD210N*				Power Supplies
		1NC	A0D201N*	B			LED Illumination
		1NO-1NC	A0D211N*	G R	45.4 (1 or 2 blocks) 65.4(3 or 4 blocks) 1	4	Controlloro
	Maintained	2N0	AOD220N*	Y			Controllers
		2NC	A0D202N*	S			Operator Interfaces
		2NO-2NC	A0D222N*	W			Sensors
Extended with Half Shroud		1N0	ABGD210N*	В			0010010
ABGD2 AOGD2		1NC	ABGD201N*	G			AUTO-ID
AUGDZ	Momentary	1NO-1NC	ABGD211N*	R			
-	womentary	2N0	ABGD220N*	Y	Pane 0.8 f	el Thickness to 3.5 ø39	
		2NC	ABGD202N*	S W			
		2NO-2NC	ABGD222N*	••		82.07 22	Flush Silhouette
		1N0	AOGD210N*	В		633 633 F	ø16
		1NC	AOGD201N*	G	40.9 (1 or 2 blocks) 18.		
	Maintained	1NO-1NC	AOGD211N*	R	40.9 (1 or 2 blocks) 18. 60.9 (3 or 4 blocks) 20.		ø22
		2N0	AOGD220N*	Y S			ø30
		2NC	AOGD202N*	Ŵ			Miniature
Extended with Full Shroud		2NO-2NC	AOGD222N*				Miniature
Extended with Full Shroud ABFD2		1N0	ABFD210N*	В			Pilot Lights
A0FD2		1NC 1NO-1NC	ABFD201N*	G			
	Momentary	2N0	ABFD211N* ABFD220N*	R Y	D	Thicknoon	
		2NC	ABFD220N*	S	- <u></u>	anel Thickness 8 to 6 Ø39	
		2NO-2NC	ABFD202N*	W			TWN
		1N0	AOFD210N*				TWND
		1NC	AOFD201N*	В			
		1NO-1NC	AOFD211N*	G R	45.4 (1 or 2 blocks) 1 65.4 (3 or 4 blocks) 16		ARN
	Maintained	2N0	AOFD220N*	Y	65.4 (3 or 4 blocks) 16	<u></u>	CS
		2NC	AOFD202N*	S			
		2NO-2NC	AOFD222N*	W			
		Ento Ento	AUDELEN				

• Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow), S (blue), W (white)

• Round bezel (metal): Chrome-plated

Pushbuttons with 1 or 3 contact blocks have a dummy block.
See B-307 for other contact configurations and gold-plated silver contacts.

• See B-312 for bottom view.

• Terminal screws: M3.5

• Integrated terminal cover

Note ABD1, AOD1 with button color of B (black), G (green), or (R) red

Supply of color buttons B, G, R has been discontinued for ABD1/AOD1 without color code. When ordering, make sure to specify the required button color code.

IDEC

ø30 TWND Series

Mushroom/Mushroom with Full Shroud/Jumbo Mushroom/Jumbo Mushrooms with Shallow/Deep Shroud/Pin Lock

liot							Package Quantity: 1		
Pilot Lights	Shape	Operation	Contact	Part No. (Ordering No.)	Button Color Code	Dimensions	(All dimensions in mm.)		
0,	Mushroom		1N0	ABD310N*	В				
	ABD3 AOD3		1NC 1NO-1NC	ABD301N* ABD311N*	G R				
APEM		Momentary	2N0	ABD320N*	n Y	Panel Thickness 0.8	to 7.5 = 29.4 =t		
Switches &			2NC	ABD302N*	S				
Pilot Lights			2NO-2NC	ABD322N*	W		<u>(</u>)		
Control Boxes			1N0 1NC	AOD310N* AOD301N*	B G				
Emergency Stop Switches		Maintained	1NO-1NC	A0D311N*	R	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 22	40		
Enabling		Maintaineu	2N0	AOD320N*	Y S				
Switches			2NC 2N0-2NC	AOD302N* AOD322N*	W				
Safety Products	Mushroom with Full Shroud		1N0	ABGD310N*	В				
Explosion Proof	ABGD3 AOGD3		1NC	ABGD301N*	G		29.4		
Terminal Blocks		Momentary	1NO-1NC 2NO	ABGD311N* ABGD320N*	R Y				
Relays & Sockets			2NC	ABGD302N*	S	848 A A			
Circuit			2N0-2NC	ABGD322N*	W				
Protectors			1N0 1NC	AOGD310N* AOGD301N*	B G	43.9 (1 or 2 blocks) 63.9 (3 or 4 blocks) 23.5	40		
Power Supplies		Maintained	1NO-1NC	AOGD311N*	R	1			
LED Illumination	-	Wallhaneu	2N0	AOGD320N*	Y S				
			2NC 2NO-2NC	AOGD302N* AOGD322N*	W				
Controllers	Jumbo Mushroom		1N0	ABD410N*			29.4		
Operator Interfaces	ABD4		1NC	ABD401N*		Panel Thickness 0.8 to 7.5			
Sensors			1NO-1NC	ABD411N*	N* G				
AUTO-ID		Momentary	2N0	ABD420N*	R				
			2NC	ABD402N*	Y	45.4 (1 or 2 blocks)			
			2NO-2NC	ABD422N*		65.4 (3 or 4 blocks) 29	40		
	Jumbo Mushroom with		1N0	ABGD410N*		Panel Thickness 0.8 to 7.5	29.4		
Flush Silhouette	Shallow Shroud ABGD4		1NC ABGD401N*						
ø16			1NO-1NC	ABGD411N*	В				
ø22		Momentary	2N0	ABGD420N*	G R				
ø30			2NC	ABGD402N*	Y				
030						45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 29	40		
Miniature	Jumbo Mushroom with		2N0-2NC	ABGD422N*		Panel Thickness 0.8 to 7.5	29.4		
Pilot Lights	Deep Shroud		1N0	ABFD410N*					
	ABFD4		1NC	ABFD401N*	В				
		Momentary	1NO-1NC	ABFD411N*	B G	414 975			
TWN			2N0	ABFD420N*	R Y				
			2NC	ABFD402N*		45.4 (1 or 2 blocks)			
TWND			2NO-2NC	ABFD422N*		45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 33	40		
ARN	Pin Lock (On-off Lock Type) (*1) ABD8P		1N0	ABD8P10N*					
CS			1NC 1NO-1NC	ABD8P01N* ABD8P11N*	B G		40		
			2N0	ABD8P11N* ABD8P20N*	G R				
		¥10.	2NC	ABD8P02N*	Ŷ	Panel Thickness 0.8 to 7.5			
		y a	2NO-2NC	ABD8P22N*					
	Pin Lock (On-lock Type) (*1) ABD8PN		*1) <u>1NO ABD8PN10N*</u>						
			1NC 1NO-1NC	ABD8PN01N* ABD8PN11N*	B G				
			2N0	ABD8PN20N*	R	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 27.5			
			2NC	ABD8PN02N*	Y		*		
			2N0-2NC	ABD8PN22N*					

• Specify a color code in place of * in Part No. B (black), G (green), R (red),

Y (yellow), S (blue), W (white)

IDEC

• Round bezel (metal): Chrome-plated

• Pin Lock (On-lock type): Button can be locked in depressed position by inserting the pin (the button cannot be locked in reset position).

• Pushbuttons with 1 or 3 contact blocks have a dummy block.

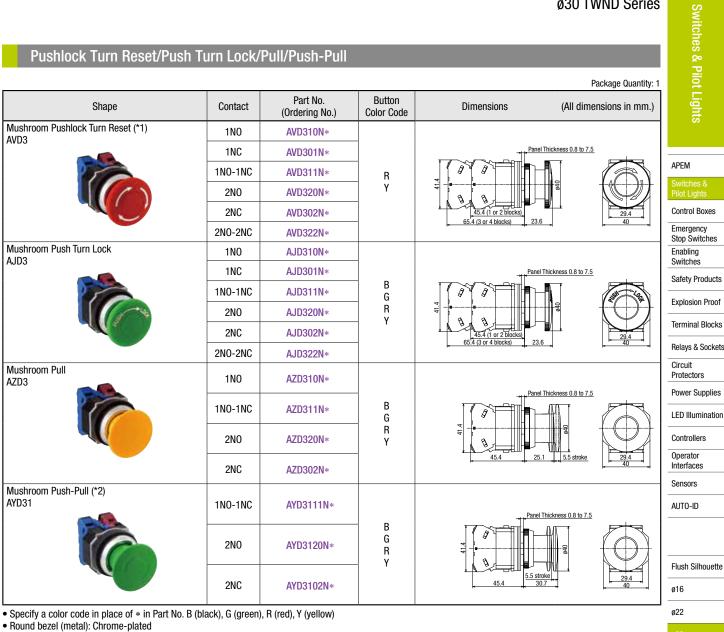
• See B-307 for other contact configurations and gold-plated silver contacts. • See B-342 for maintenance parts.

*1) The pin for ABD8P is ø4.6 mm and is not compatible with ABN8P (old series).

• See B-312 for bottom view. • Terminal screws: M3.5

· Integrated terminal cover

Pushlock Turn Reset/Push Turn Lock/Pull/Push-Pull



Pushbuttons with 1 or 3 contact blocks have a dummy block.

• See B-307 for other contact configurations and gold-plated silver contacts.

• Mushroom pull has up to 2 contact blocks.

*1) Pushlock turn reset switches cannot be used as emergency stop switches. When emergency stop switches are required, use XN series emergency stop switches (ISO 13850 and IEC 60947-5-5 compliant).

*2) Push-Pull switches with red button cannot be used as emergency stop switches. When emergency stop switches are required, use XN series emergency stop switches (ISO 13850 and IEC 60947-5-5 compliant).

• See B-312 for bottom view.

• Terminal screws: M3.5

Integrated terminal cover

Pushbutton operation

Pushlock Turn Reset

Button is maintained when pressed and is reset when turned clockwise.

Push Turn Lock

Button is locked when turned clockwise in the depressed position and is reset when turned counterclockwise.

<u>Pull</u>

Pulling the button operates the contacts, and releasing the button return the contacts.

Push-Pull

2-position switches with button maintained in both depressed and reset positions.

Pull contact operation

Contract	AZD3						
Contact	Normal	Pull					
1N0	ملم	4 o L o					
2N0-2NC	o [⊥] o •⊥•	•.•					
2N0	میں میں						
2NC	•-						

Contact	AYE	AYD31					
COIIIaCI	Push	Pull					
1N0	പ്പ പ്പ	919					
2N0	ملو مرو	100 L00					
2NC	•••						

Push-Pull contact operation

Miniature

Pilot Lights

TWN

ARN

CS

LED Illuminated Extended/Extended with Full Shroud

Pilot Lights	Shape	Base	Operation	Operating Voltage	Contact	Part No. (Ordering No.)	Button Color Code	
ία.	Extended			Ū	1NO-1NC	ALD22211DN*		
	ALD2			24V AC/DC	2N0	ALD22220DN*		
	AOLD2			211110/20	2NC	ALD22202DN*	R	
APEM					1NO-1NC	ALD21611DN*	G	
Switches &			Momentary	100/110V AC	2N0	ALD21620DN*	- Y	
Pilot Lights			-		2NC	ALD21602DN*	— A S	
Control Boxes					1NO-1NC	ALD22611DN*	PW	
Emergency				200/220V AC	2N0	ALD22620DN*		
Stop Switches	(24V AC/DC)	DAGO			2NC	ALD22602DN*		
Enabling Switches		BA9S			1NO-1NC	AOLD22211DN*		
				24V AC/DC	2N0	AOLD22220DN*		
Safety Products					2NC	AOLD22202DN*	R G Y A S PW	
Explosion Proof					1NO-1NC	AOLD21611DN*		
			Maintained	100/110V AC	2N0	AOLD21620DN*		
erminal Blocks					2NC	AOLD21602DN*		
elays & Sockets	With transformer				1NO-1NC	AOLD22611DN*		
Circuit				200/220V AC	2N0	AOLD22620DN*		
Protectors	(100/110V AC)				2NC	AOLD22602DN*		
Power Supplies	Extended with Full Shroud		Momentary	24V AC/DC	1NO-1NC	ALFD22211DN*		
	ALFD2 AOLFD2				2N0	ALFD22220DN*		
ED Illumination	AULFD2				2NC	ALFD22202DN*	R G Y A S	
Controllers				100/110V AC	1NO-1NC	ALFD21611DN*		
					2N0	ALFD21620DN*		
Operator Interfaces					2NC	ALFD21602DN*		
					1NO-1NC	ALFD22611DN*	PW	
Sensors				200/220V AC	2N0	ALFD22620DN*		
AUTO-ID	(24V AC/DC)	BA9S			2NC	ALFD22602DN*		
		2,100			1NO-1NC	AOLFD22211DN*		
				24V AC/DC	2N0	AOLFD22220DN*		
					2NC	AOLFD22202DN*	R	
lush Silhouette					1NO-1NC	AOLFD21611DN*	GY	
			Maintained	100/110V AC	2N0	AOLFD21620DN*	— A	
ø16					2NC	AOLFD21602DN*	S	
ø22					1NO-1NC	AOLFD22611DN*	PW	
922	With transformer (100/110V AC)			200/220V AC	2N0	AOLFD22620DN*	_	
ø30	(100/110V AC)				2NC	AOLFD22602DN*		

· Illuminated pushbuttons have an LED lamp installed.

Pilot Lights • Round bezel (metal): Chrome-plated

• See B-308 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.

dummy block.

• See B-314 for bottom view.

Dimensions

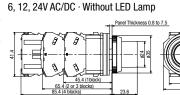
Extended, LED illuminated (momentary/maintained) ALD2/AOLD2 (terminal screws M3.5)

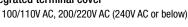
23

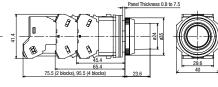
ARN

TWN

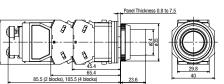
CS

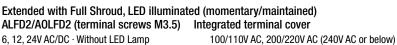




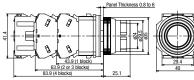


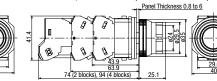
110V DC, 380V AC or over



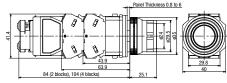


6, 12, 24V AC/DC · Without LED Lamp





110V DC, 380V AC or over



Integrated terminal cover

LED Illuminated Mushroom (ø40)/Mushroom Pushlock Turn Reset

						Package Quantity: 1	루
Shape	Base	Operation	Operating Voltage	Contact	Part No. (Ordering No.)	Color Code	llot Lights
Mushroom (ø40)				1NO-1NC	ALD32211DN*		0,7
ALD3			24V AC/DC	2N0	ALD32220DN*		
A0LD3				2NC	ALD32202DN*		APEM
				1NO-1NC	ALD31611DN*	R G	Switches &
		Momentary	100/110V AC	2N0	ALD31620DN*	Y	Pilot Lights
				2NC	ALD31602DN*	A S	Control Boxes
			200/220V AC	1NO-1NC	ALD32611DN*	5	
				2N0	ALD32620DN*		Emergency Stop Switches
(24V AC/DC)	BA9S			2NC	ALD32602DN*		Enabling
	DA93			1NO-1NC	AOLD32211DN*		Switches
			24V AC/DC	2N0	AOLD32220DN*		Safety Products
			aintained 100/110V AC 200/220V AC	2NC	AOLD32202DN*	R	Explosion Proof
		Maintained		1NO-1NC	AOLD31611DN*	GY	
				2N0	AOLD31620DN*	A	Terminal Blocks
				2NC	AOLD31602DN*	W	Relays & Sockets
				1NO-1NC	AOLD32611DN*	S	Circuit
With transformer (100/110V AC)				2N0	AOLD32620DN*		Protectors
(100/1107 AC)				2NC	AOLD32602DN*		Power Supplies
Mushroom Pushlock Turn Reset (*1)				1NO-1NC	AVLD32211DN*		
AVLD3			24V AC/DC	2N0	AVLD32220DN*		LED Illumination
				2NC	AVLD32202DN*		Controllers
				1NO-1NC	AVLD31611DN*		Operator
	BA9S	_	100/110V AC	2N0	AVLD31620DN*	R	Interfaces
		-		2NC	AVLD31602DN*		Sensors
				1NO-1NC	AVLD32611DN*		
(24V AC/DC)			200/220V AC	2N0	AVLD32620DN*		AUTO-ID
, , ,				2NC	AVLD32602DN*		

• Specify a color code in place of * in Part No. R (red), G (green), Y (yellow), A (amber), S (blue)

• Illuminated pushbuttons have an LED lamp installed.

• Round bezel (metal): Chrome-plated

• See B-308 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.

• See B-308 for other contact configurations and gold-plated silver contacts.

• Illuminated pushbutttons of 24V AC/DC or below with 2 or 4 contact blocks have a dummy block.

*1) Pushlock turn reset switches cannot be used as emergency stop switches. When emergency stop switches are required, use XN series emergency stop switches (ISO 13850 and IEC 60947-5-5 compliant).

ness 0.8 to 7.5

el Thickness 0.8 to 7.5

23.6

• See B-314 for bottom view.

Illuminated pushbutton operation

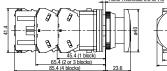
Pushlock Turn Reset

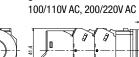
Button is maintained when pressed and is reset when turned clockwise.

Mushroom, LED illuminated (momentary/maintained)

ALD3/AOLD3 (terminal screws M3.5)

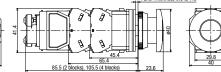
6, 12, 24V AC/DC · Without LED Lamp

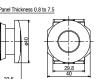




Integrated terminal cover

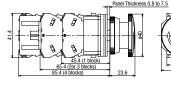
110V DC, 380V AC or over





Mushroom Pushlock Turn Reset, LED illuminated AVLD (terminal screws M3.5)

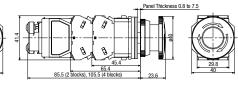
6, 12, 24V AC/DC · Without LED Lamp





75.5 (2 blocks), 95.5 (4 blocks

110V DC, 380V AC or over



Miniature
Pilot Lights
TWN
TWND

Flush Silhouette

ø16

ø22

CS

ø30 TWND Series

ASD Selector Switches (Knob Operator)



APEM **Control Boxes** Emergency Stop Switches Enabling Switches Safety Products Explosion Proof Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces Sensors AUTO-ID Flush Silhouette ø16 ø22 Miniature Pilot Lights TWN ARN

Shape	ASD												
		Contact C	configuratio	n		Maintained	Spring Return from Right		Spring Return from Left				
		Contact	Block		Operator Position	1 2		Contact	Contact Block Op			1 2	
	Contact	Mounting Position	Contact	1	2			Mounting Position	Contact	1	2		
	1NO (10)	① ②	NO	Dur	• mmy Block	ASD210N	ASD2110N	① ②	NO	•		ASD2210N	
90°		0	NO	Dui				0	NO	•	_		
2-position	1NO-1NC (11)	 	NC	•		ASD211N	ASD2111N	 	NC	•	•	ASD2211N	
		0	NO		•			0	NO	•			
	2N0 (20)	 	NO			ASD220N	ASD2120N	2	NO	•		ASD2220N	
	(20)	0	NO		•			0	NO	•			
	2NO-2NC	() (2)	NC	•				2	NC	-	•		
	(22)	3	NO			ASD222N	ASD2122N	3	NO	•	-	ASD2222N	
		(4)	NC	•				(4)	NC		•		
		Contact C	configuratio	on		Maintained	Spring Return from Right	Spring Return from Left			1	Spring Return Two-way	
		Contact	Block	Operator Position		1 0 2	1 0 2						
	Contact	Mounting Position	Contact	1	0 2								
	2N0	0	NO	•		ACDOON	ACD2100N	4000000					
	(20)	2	NO			ASD320N	ASD3120N		ASD3220N	N		ASD3320N	
	2NC	1	NC			ASD302N	ASD3102N		ASD3202N	J		10000000	
	(02)	2	NC			ASDSUZN	ASDSTUZN		ASDSZUZI	N		ASD3302N	
		0	NO	•									
	2N0-2NC	2	NO		•	ASD322N	ASD3122N		ASD3222N	J		ACDOGONI	
45°	(22)	3	NC			AUDUZZIN	AUDUIZZN		RUDUZZZI	•		ASD3322N	
3-position		4	NC										
		1	NO	•									
	4N0	2	NO		•	ASD340N	ASD3140N		ASD3240N	J		ASD3340N	
	(40)	3	NO	•		10001011	ADDOTTON		10002-101			A3D3340N	
		4	NO		•								
		0	NC										
	4NC	2	NC			ASD304N	ASD3104N		ASD3204N	J		ASD3304N	
	(04)	3	NC			1000011	10001011			-		A3D330411	
		4	NC										
		1	NO	•									
	☆	2	NO		•	☆	_		_				
	3\$	3	NC			ASD33SN-243						_	
			1	D	DII-	1	1	1				1	

Knob: Black

CS

• Round bezel (metal): Chrome-plated

· Selector switches with 1 or 3 contact blocks have a dummy block.

4

 Knob operator can be installed at every 45 degrees intervals in addition to the positions shown in the above table.

Dummy Block

• See B-321 to B-322 for other contact configurations.





• Turn the operator to each position accurately.

• Selector switches with \thickapprox have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.

• See B-308 for gold-plated silver contacts.

• See B-312 for bottom view.

Dimensions Panel Thickness 0.8 to 7.5 0.8 to 7.5 0.8 to 7.5 0.5 do 7.5 do 7.5 0.5 do 7.5 do 7.5 do 7.5 do 7.5

Terminal Screws: M3.5

Terminal cover: integrated

Package Quantity: 1

IDEC

ASD L Selector Switches (Lever Operator)

											Package Quantity: 1	vilot I
Shape	Lever Opera ASD□L	.tor			8							Pilot Lights
												APEM Switches &
		Contact C	Configuration	ion	Maintained	Spring Return from Right		Spr	ring Ret	turn frc	om Left	Pilot Lights Control Boxes
		Contact	Block	Operator Position	1 2	1 2	Contact	t Block		erator sition	1 2	Emergency Stop Switches
	Contact	Mounting Position	Contact				Mounting Position	Contact		2		Enabling Switches
	1N0 (10)	① ②	N0	Dummy Block	ASD2L10N	ASD21L10N	0	NO	•		ASD22L10N	Safety Products
90° 2-position	1N0-1NC	0	NO	•	ASD2L11N	ASD21L11N	0	NO	•		ASD22L11N	Explosion Proof
2-poonton.	(11)	2	NC		ASDZLTTN	ASUZILIIN	2	NC	<u> </u>	•	ASUZZLIIN	Terminal Blocks
	2N0 (20)	0	NO	•	ASD2L20N	ASD21L20N	0	NO	•	-	ASD22L20N	Relays & Sockets
	(20)	2	NO NO	•	++	[2 ①	NO NO	•	+		Circuit
	2N0-2NC	 	NO	•	100010001	10004L00N	() (2)	NC		•	1000010011	Protectors
	(22)	3	NO		ASD2L22N	ASD21L22N	3	NO	•		ASD22L22N	Power Supplies
		4	NC	•	L		4	NC		•		LED Illumination
		Contact C	Configuration		Maintained	Spring Return from Right	Sprin	ng Return fi	irom Le	eft	Spring Return Two-way	Controllers
	Contact	Contact	Block	Operator Position		1 0 2		1 • 0	2		1 0 - 2	Operator Interfaces
	Contact	Mounting Position	Contact					\searrow	, 			Sensors
	2N0	0	NO		ASD3L20N	ASD31L20N		ASD32L2	NUN		ASD33L20N	AUTO-ID
	(20)	2	NO	•	AUBULLUI	AUDUILLUI	<u> </u>	HODOLL			AUDUOLLUN	
	2NC	0	NC		ASD3L02N	ASD31L02N		ASD32L0	J2N		ASD33L02N	ı
	(02)	2	NC NO		++	ſ	+					Flush Silhouette
	2N0-2NC	() (2)	NO			L						
	2N0-2NC (22)	3	NC		ASD3L22N	ASD31L22N		ASD32L2	2 N		ASD33L22N	ø16
45° 3-position		4	NC		1	1						ø22
3-position		0	NO	•		1	1				<u> </u>	ø30
	4N0	2	NO			ACD241 40N		******/	1011			030
	(40)	3	NO	•	ASD3L40N	ASD31L40N		ASD32L4	ON		ASD33L40N	Miniature
	!	4	NO	•		1						Pilot Lights
		0	NC			1						
	4NC	2	NC		ASD3L04N	ASD31L04N		ASD32L04	NAM .		ASD33L04N	ı
	(04)	3	NC		ASDSLOHN	ASUSTLUHN		ASDSEL	4iv		ASDSSLOAN	i
		4	NC			I						TWN
	ſ !	0	NO	•		1]					
	☆ 3S	2	NO	•	ASD3L3SN-243	i <u> </u>		_				TWND
	3S	3	NC			í.						ARN
		4		Dummy Block							I	CS

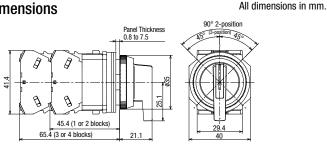
Lever: Black
Round bezel (metal): Chrome-plated
Selector switches with 1 or 3 contact blocks have a dummy block.
Knob operator can be installed at every 45 degrees intervals in addition to the positions shown in the above table.

Contact Block Mounting Position



Turn the operator to each position accurately.
Selector switches with ☆ have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
See B-308 for gold-plated silver contacts.
See B-312 for bottom view.

Dimensions



Terminal Screws: M3.5

Terminal cover: integrated

IDEC

Shape

ASD K Key Selector Switches

Key Selector (Key No. 0) ASD⊡K

Shape																							
								Coving Daturo															
	Contact Configuration				Maintained	from Right					m Left												
		Contact	Block						Contact Block		Operator Position												
	Contact	Mounting Position	Contact	1	2				Mounting	Contact	1	2											
	1NO		NO		•				-	NO	•												
000	(10)			Dum	-	lock	ASD2K10N	ASD21K10N		_	-		ASD22K10N										
	1N0-1NC	1	NO		•				0	NO	٠												
	(11)	2	NC				ASD2K11N	ASD21K11N	2	NC		•	ASD22K11N										
	2N0	1	NO		۲		VEDSKOUN	ASD21K20N	0	NO	٠		ASD22K20N										
	(20)	2			۲		ASDZIZON	ASDZTRZON	2	NO	•		ASDZZIZON										
		1	NO		•				0	NO	•												
	2N0-2NC	2	NC	•			ASD2K22N	ASD21K22N	2	NC		•	ASD22K22N										
	(22)				•		HODERLEN	HODE MEEN		NO	•		NODELILEIT										
		4	NC						4	NC		•											
	Contact Configuration					Maintained	Spring Return from Right	Spring Return from Left			Spring Return Two-way												
												Contact	Block Operate		ator Po	sition	102	1 0 👡 2	1, 0 2				1, 0, 2
	Contact	Mounting Position	Contact	1	2		\bigvee	\bigvee															
	2N0	1	NO					45D31K20N		72035K3	ON		ASD33K20N										
	(20)	2	NO			•	ASDSIZON	ASDSTREEN		AUDUZNZ			ASDSSR20N										
	2NC	1					ASD3K02N	ASD31K02N		ASD32K0	2N		ASD33K02N										
	(02)		-																				
		_	-	•																			
			-		_		ASD3K22N	ASD31K22N		ASD32K2	2N		ASD33K22N										
45°	(22)				5																		
3-position																							
	4NO					•																	
	(40)		-	•			ASD3K40N	ASD31K40N		ASD32K4	ON		ASD33K40N										
	(-7		-	-		•																	
			-																				
	4NC		NC																				
	(04)		NC				ASD3K04N	ASD31K04N		ASD32K0	4N		ASD33K04N										
		4	NC																				
		1	NO	•																			
	~	2	NO			•																	
	3Ŝ	3	NC		•		ASD3K3SN-243	_		_			—										
		4	_	Dum	nmy B	lock																	
	90° 2-position	90° 2-position Contact 1N0 (10) 1N0-1NC (11) 2NO (20) 2NO-2NC (22) 2NO (20) Contact 2NO (20) 2NO-2NC (22) 2NO (20) 2NC (02) 2NO (20) 2NC (02) 2NO-2NC (02) 2NO-2NC (02) 2NO-2NC (02) 2NO-2NC (02) 4NO (40) 4NC	Contact Contact 00° Contact Mounting Position 1N0 ① ① 1N0 ① ① 1N0 ① ① 1N0 ① ① 1N0-1NC ① ① 2N0 ① ① 2N0-2NC ② ③ 2N0-2NC ② ③ 2N0-2NC ② ③ (20) ② ③ 2N0-2NC ③ ④ 2N0 ① ① (20) ② ③ 2N0 ① ① (20) ② ③ 2N0 ① ② (20) ② ③ 2N0-2NC ③ ③ 45° ④ ① ③ 3-position ① ③ ④ 440 ③ ③ ④ 440 ③ ④ ③ 4NC ③	90° Contact Configurat 2-position Contact Mounting Position Contact 1N0 ① N0 1N0 ① N0 1N0-1NC ① N0 1N0-1NC ① N0 2N0 ① N0 2N0-2NC ② N0 2N0-2NC ② N0 2N0-2NC ② N0 2N0-2NC ③ N0 2N0 ① N0 2N0-2NC ② N0 2N0-2NC ③ N0 2N0-2NC ③ N0 2N0-2NC	90° Contact Configuration 1N0 \bigcirc Contact Block 0 1N0 \bigcirc O NO 1N0 \bigcirc NO 1 1N0-1NC \bigcirc NO 0 2-position 1NO-1NC NO 0 2NO \bigcirc NO 0 0 2NO \bigcirc NO 0 0 2NO-2NC \bigcirc NO 0 0 2NO \bigcirc NO	$45^{\circ} 3-position + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 1$	Ore Contact Configuration Contact Contact Block Operator Position 1N0 Contact 1 2 1N0 0 N0 0 2N0 0 N0 0 2N0-2NC 0 NC 0 2N0-2NC 0 NC 0 2N0-2NC 0 NC 0 2N0-2NC 0 NC 0 2N0 0 NC 0 2N0 0 NO 0 2N0 0 NO 0 2N0 0 NC 0	Ontact Configuration Maintained Contact Contact Block Operator Position Operator Position Maintained 90° 2. 1 2 1 2 1NO 0 0 4SD2K10N 1 2 1NO 10 2 - Dummy Block ASD2K10N 1NO-1NC 0 NO 0 ASD2K20N ASD2K20N 2NO 0 NO 0 ASD2K20N ASD2K20N 2NO 0 NO 0 ASD2K20N ASD2K20N 2NO-2NC 0 NO 0 ASD2K22N 2NO-2NC 0 NC 0 ASD2K22N 2NO-2NC 0 NC 0 1 2 2NO 0 NO 0 ASD3K2N 1 2NO 0 NO 0 ASD3K2N 1 2 2NO 0 NO 0 ASD3K2N 3 ASD3K4N 4SD3K4N </td <td>Image: second second</td> <td>Spring Return from Right Contact Configuration Maintained Spring Return from Right Contact 90° 2-position 1 2 1 2 1 2 Mounting Position Contact 90° 2-position 1N0 0 N0 • ASD2K10N ASD21K10N 0 0 0 1N0 0 N0 • ASD2K10N ASD21K10N 0</td> <td>Image: contact Configuration Maintained Spring Return from Right Spring Return from Right Spring Return from Right Spring Return 90° Contact Block Operator Position 1 2 1 2 1 2 1 0 Contact Block Mounting Position Contact Block NO Contact Block Contact Block Contact Block NO Contact Block Cont</td> <td>Image: contact Configuration Maintained Spring Return from Right Contact Block Operator Position 90° contact Contact Block Operator Position 1 2 1 2 1 0 NO 0 <</td> <td>Spring Return from Right Spring Return from Right Spring Return from Right 90° Contact Block Operator Position Asintained Spring Return from Right Contact Block Operator Position 1 2 1 - 1 -</td>	Image: second	Spring Return from Right Contact Configuration Maintained Spring Return from Right Contact 90° 2-position 1 2 1 2 1 2 Mounting Position Contact 90° 2-position 1N0 0 N0 • ASD2K10N ASD21K10N 0 0 0 1N0 0 N0 • ASD2K10N ASD21K10N 0	Image: contact Configuration Maintained Spring Return from Right Spring Return from Right Spring Return from Right Spring Return 90° Contact Block Operator Position 1 2 1 2 1 2 1 0 Contact Block Mounting Position Contact Block NO Contact Block Contact Block Contact Block NO Contact Block Cont	Image: contact Configuration Maintained Spring Return from Right Contact Block Operator Position 90° contact Contact Block Operator Position 1 2 1 2 1 0 NO 0 <	Spring Return from Right Spring Return from Right Spring Return from Right 90° Contact Block Operator Position Asintained Spring Return from Right Contact Block Operator Position 1 2 1 - 1 -										

Cylinder: Chrome-plated

• Round bezel (metal): Chrome-plated

• Key selector switches with 1 or 3 contact blocks have a dummy block.

• On spring-returned types, the key can be released only from the maintained position. On maintained types, the key can be released from every position. See B-308 for specifying key retained positions.

Contact Block Mounting Position



IDEC



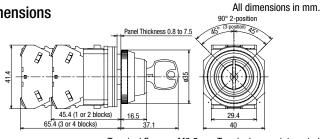
• Key selector switch is supplied with two standard keys. (1) Insert the key completely before turning the key, otherwise failure will result.

(2) Turn the operator to each position accurately.
Different key number is available upon request. Contact IDEC.
Selector switches with X have a half contact operating current (load switching current

value). Rated insulation voltage and rated current remain the same.

See B-308 for gold-plated silver contacts.
See B-312 for bottom view.

Dimensions



Terminal Screws: M3.5

Terminal cover: integrated

Package Quantity: 1

CS

ASLD Illuminated Selector Switches (LED)

Package Quantity: 1

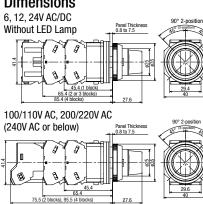
Switches & Pilc

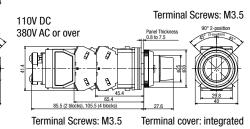
Shape	Illuminat ASLD	ed Selecto	or Switch	nes (BA9S	Base	e)	1						r donago	Quantity: 1	ot Lights
								(24V AC/DC)								APEM Switches &
		Contact	Configura					Maintained	Spring Return from Right		Spri	-		om Left		Pilot Lights
	Contact	Contact	Block		Operat Positic		Operating Voltage	1 2	1 - 2	Contact Block Operat Position				1 2	Color Code	Control Boxes
	oontaot	Mounting Position	Contact	1	2		g .	\sim		Mounting Position	Contact	1	2		oouo	Emergency Stop Switches
	110 110	1	NO				24V AC/DC	ASLD22211DN*	ASLD212211DN*	0	NO	•		ASLD222211DN*		Enabling
	1NO-1NC (11)	2	NC	\bullet			100/110V AC	ASLD21611DN*	ASLD211611DN*	2	NC			ASLD221611DN*		Switches
90°	. ,						200/220V AC	ASLD22611DN*	ASLD212611DN*					ASLD222611DN*	R	Safety Products
2-position	2N0	0	NO		•		24V AC/DC	ASLD22220DN*	ASLD212220DN*	0	NO	•		ASLD222220DN*	G	Explosion Proof
	(20)	2	NO]	100/110V AC	ASLD21620DN*	ASLD211620DN*	2	NO			ASLD221620DN*	Y	· · · · · · · · · · · · · · · · · · ·
							200/220V AC	ASLD22620DN*	ASLD212620DN*			6		ASLD222620DN*	A S	Terminal Blocks
		0	NO				24V AC/DC	ASLD22222DN*	ASLD212222DN*	0	NO	•		ASLD222222DN*	PW	Relays & Sockets
	2N0-2NC	2	NC	•			100/110V AC	ASLD21622DN*	ASLD211622DN*	2	NC		•	ASLD221622DN*		Circuit
	(22)	3	NO	_	•		200/220V AC	ASLD22622DN*	ASLD212622DN*	3	NO	•		ASLD222622DN*		Protectors
		4	NC	•			_		Spring Return from	4	NC		•	Spring Return		Power Supplies
	Contact Configuration					Operating	Maintained	Right	Spring Return from Left			eft	Two-way	Color	LED Illumination	
	Contact	Contact Mounting	Contact	Oper 1	ator Po	2	Voltage					2			Code	Controllers
		Position ①	NO	•		-	24V AC/DC	ASLD32220DN*	ASLD312220DN*	ΔSU	 D322220	NN*		ASLD332220DN*		Operator
	2N0	 	NO	-		•	100/110V AC	ASLD31620DN*	ASLD311620DN*		D321620			ASLD331620DN*		Interfaces
	(20)		110			•	200/220V AC	ASLD32620DN*	ASLD312620DN*		D322620			ASLD332620DN*		Sensors
		0	NC				24V AC/DC	ASLD32202DN*	ASLD312202DN*		D322202			ASLD332202DN*		AUTO-ID
	2NC	2	NC		5		100/110V AC	ASLD31602DN*	ASLD311602DN*		D321602			ASLD331602DN*		
	(02)				-		200/220V AC	ASLD32602DN*	ASLD312602DN*		D322602			ASLD332602DN*		
45°		0	NO	•			24V AC/DC	ASLD32222DN*	ASLD312222DN*		D322222			ASLD332222DN*		
3-position	2N0-2NC	2	NO				100/110V AC	ASLD31622DN*	ASLD311622DN*		D321622			ASLD331622DN*	R	Flush Silhouette
	(22)	3	NC				200/220V AC	ASLD32622DN*	ASLD312622DN*		D322622			ASLD332622DN*	G Y	
		4	NC						_		_			_	А	ø16
		1	NO	\bullet			24V AC/DC	ASLD32240DN*	ASLD312240DN*	ASL	D322240)DN*		ASLD332240DN*	S PW	ø22
	4N0	2	NO				100/110V AC	ASLD31640DN*	ASLD311640DN*	ASL	D321640)DN*		ASLD331640DN*		
	(40)	3	NO	•			200/220V AC	ASLD32640DN*	ASLD312640DN*	ASL	D322640)DN*		ASLD332640DN*		ø30
		4	NO				—		-		_			—		Miniature
		0	NC				24V AC/DC	ASLD32204DN*	ASLD312204DN*	-	D322204			ASLD332204DN*		
	4NC	2	NC				100/110V AC	ASLD31604DN*	ASLD311604DN*	ASL	D321604	DN*		ASLD331604DN*		Pilot Lights
	(04)	3	NC				200/220V AC	ASLD32604DN*	ASLD312604DN*	ASL	D322604	DN*		ASLD332604DN*		
		4	NC				—	—	_		_			—		
	(green), Y (y	ellow), A (a	mber), S	lo. (blue)). PW ((pure v	white)		Illuminated selector swi dummy block.				ow wit	h 2 or 4 contact blocks I	nave a	TWN
 Round bez Illuminated 	d sèlector s	witches ha	ve an LED					•	Turn the operator to each See B-309 for gold-plat	ted silver co						TWND
 Use a pure See B-309 							2V AC/DC, and		See B-314 for bottom v	iew.						

Specify a color code in piace of * in Part No. R (red), G (green), Y (yellow), A (amber), S (blue). PW (pure white)
Round bezel (metal): Chrome-plated
Illuminated selector switches have an LED lamp installed.
Use a pure white (PW) LED for yellow (Y) illumination.
See B-309 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.

Contact Block Mounting Position Dimensions







IDEC

All dimensions in mm.

ASBD2 Selector Pushbuttons

Pilot											Package Quantity:
Pilot Lights	Shape	Contact Configuration	Circuit Code	Con Blo	Ring Position Left Right			Right	Button Color Code	Ring Operator	
APEM				Mounting Position	Contact	Normal	Pusht Push	outton Normal	Push	ooue	Part No. (Ordering No.)
	Ring Operator (90°2-position) ASBD2			0	NO		•		•	В	
Control Boxes Emergency		11 (1NO-1NC)	A03	0	NC	•				G R Y	ASBD211N-A03*
Stop Switches Enabling				0	NO		•		•		
Switches				2	NC	•					
Safety Products			A08	3	NO		•				ASBD222N-A08*
Explosion Proof				4	NC						
				0	NO		٠				
Terminal Blocks			5.42	2	NO						\$
elays & Sockets			☆ C10	3	NC						ASBD222N-C10*
Circuit				4	NC						
Protectors				0	NO		•			В	
Power Supplies		22	D10	2	NO				•	B G	ASBD222N-D10*
		(2NO-2NC)	БТО	3	NC	•				R Y	AUDULLIN DIO.
ED Illumination				4	NC			•		T	
Controllers				0	NO		•				
Operator			\$	2	NO						☆
Interfaces			E10	3	NC		_				ASBD222N-E10*
Sensors				(4)	NC						
AUTO-ID				0	NO		•		•		
			☆ F10	2	NO		•				
			FIU	3	NC NC	•		•			ASBD222N-F10*
L	Chaolfu a color codo in placo of a in			4	-						

• Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow)

• Bezel (metal): Chrome-plated Flush Silhouette

ø22

Miniature

Pilot Lights

TWN

ARN

CS

• Circuit codes E and F: The right and left NC contact blocks on circuit code E or F may overlap each other while turning the ring operator. The NO and NC contact blocks on circuit code F may overlap each other while pressing the button. ø16

• When using the selector pushbutton, do not turn the ring operator with the pushbutton depressed. Otherwise, damage or failure may be caused.

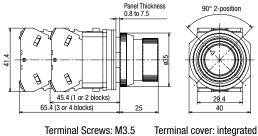
• Selector switches with 🖄 have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.

• See B-312 for bottom view.

Contact Block Mounting Position

Dimensions Ring operator (90° 2-position)

All dimensions in mm.



Terminal Screws: M3.5

IDEC

Pilot Lights (Round)

						Package Quantity: 1	ē
Shape	Illumination	Base Operating Voltage		Part No. (Ordering No.)	Color Code	LED Lamp Part No.	Lights
Round APD1			24V AC/DC	APD122DN*	R, G, Y, A, S, PW	LSRD-2	0,
	LED	BA9S	100/110V AC	APD116DN*	R, G, Y, A, S, PW		APEM
(24V AC/DC)			200/220V AC	APD126DN*	R, G, Y, A, S, PW	LSRD-6	Switches & Pilot Lights
(24V A0/D0)					1 - 1 1 1 - 1 - 1 - 1 - 1		Control Boxes

• Specify a color code in place of * in Part No.

R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)
 Round bezel (metal): Chrome-plated

• Pilot lights have an LED lamp installed.

Phot lights have an LED lamp instance.
See B-309 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.
See B-309 for how to specify units without LED lamps.
Terminal cover is installed on pilot lights for electric shock prevention.

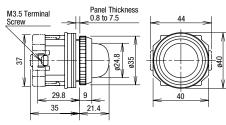
Туре	Terminal Cover	Quantity
6V, 12V, 24V AC/DC	APN-PVL	1
100V/110V AC, 200/220V AC	N-VL3	1
110V DC	N-VL3	1

Note: DC-DC converter types are not approved by UL and CSA, and not CE compliant. • See B-314 for bottom view.

Dimensions

Round, LED illuminated

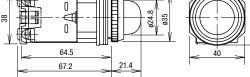
6V, 12V, 24V AC/DC · Without LED Lamp (Terminal Cover: APD-PVL)



Terminal Screws: M3.5

• See B-349 for wiring.

100 to 480V AC, 110V DC (Terminal Cover: N-VL3) M3.5 Terminal Screw Panel Thickness 0.8 to 7.5



Terminal Screws: M3.5

Controllers

Flush Silhouette

Miniature

Pilot Lights

Emergency Stop Switches

Safety Products Explosion Proof Terminal Blocks Relays & Sockets Circuit

Enabling Switches

Protectors

Power Supplies LED Illumination

All dimensions in mm.

Operator Interfaces

Sensors AUTO-ID

ø16

ø22

Nameplates

Package Quantity Model Legend Material Part No. Ordering No. Dimensions (mm) NA NA-0 1 40 1.2 Blank NA-0 APEM Aluminium NA-0PN10 10 1.2 mm thick 45 Switches & Pilot Lights White letters on black NA-🗆 1 Control Boxes background With ø30.5 NA-🗆 Legend NAPN10 10 For TWN/TWND NALO 40 1.2 NALO 1 Aluminium Blank 1.2 mm thick NALO 47.5 Black Relays & Sockets NALOPN10 10 ø30.5 Circuit For TWN/TWND Protectors

Specify a legend code in place of \Box in the Ordering No.

Legends LED Illumination

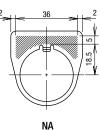
Legend
ON
0FF
START
STOP
OFF ON
HAND AUTO
HAND OFF AUTO

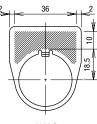
Shape and Engraving Area ø16



ARN CS

Flush Silhouette





NALO

All dimensions in mm.

Example (when the legend height is 4 mm)

Shape		ng Area m)	Max. No. of Lines	No. of Letters on	
	Height	Width	UI LINES	1 Line	
NA	5	36	1	14	
NALO	10	36	2	14	

Emergency Stop Switches Enabling Switches Safety Products Explosion Proof Terminal Blocks

Power Supplies

Controllers Operator Interfaces Sensors AUTO-ID

B-337

	1	Î		1		ot
Shape	Material	Part No.	Ordering No.	Package Quantity	Remarks	ilot Lights
Locking Ring Wrench	Nitril rubber (black)	OR-12	0R-12	1	Used to tighten the round bezel when installing the ø30 or ø25 switch onto a panel from the front. A: TWS series (ø25) B: TWN/TWND series (ø30)	APEM Switches & Pilot Lights Control Boxes Emergency Stop Switches
Lamp Holder Tool A B For TWN/TWND	Nitril rubber (black)	0R-55	0R-55	1	• Used to install and remove the LED/incandescent lamps. See B-345. A: For BA9S base B: For E12 base A 	Enabling Switches Safety Products Explosion Proof Terminal Blocks Relays & Sockets
Contact Block Removal Tool	Metal (zinc-plated) Rubber (nitryl)	TW-KC1	TW-KC1	1	Used to remove transformer units. See B-347 for how to use.	Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces
Contact Rubber Boot For momentary 1 layer of contact blocks (2 contact blocks)	Nitril rubber (black)	0C-99	0C-99	1	 Rubber boot used to prevent oil and dirt from entering into the contact block. Temperature range: 5 to +60°C When inserting a cable, cut the projection on the cover to match the cable size. 	Sensors AUTO-ID Flush Silhouette Ø16 Ø22
Anti-rotation Ring For TWN/TWND	Metal (diecast) (zinc-plated)	0GL-11	OGL-11PN10	10	 Used to prevent the operator from turning. Generally used when using no nameplates on selector switches and selector pushbuttons. See B-345 for installation. Cannot be used for pin lock. 	030 Miniature Pilot Lights
Rubber Mounting Hole Plug	Nitril rubber (black) Nitril rubber (gray)	0B-13B 0B-13	0B-13BPN05 0B-13PN05	5	 Used to plug unused ø30.5 mm mounting holes. Degree of protection: IP40 	TWN TWND ARN
Plastic Mounting Hole Plug	Plug: ABS plastic (gray) Gasket: Chloroprene rubber Locking ring: diecast zinc	0BP-11	0BP-11	1	 Tightening torque: 1.2 N·m. Degree of protection: IP65 (when there is no anti-rotation ring hole) Supplied with a locking ring. 	<u></u>
Metallic Mounting Hole Plug	Plug: ABS plastic (gray) Gasket: Chloroprene rubber Locking ring: diecast zinc	0B-11	0B-11	1	 Tightening torque: 1.2 N·m. Degree of protection: IP65 (when there is no anti-rotation ring hole) Supplied with a locking ring. 	

Accessories

filot								
Pilot Lights	Shape		Material	Pai	rt No.	Ordering No.	Package Quantity	Remarks
3	Button Cover for Exte Pushbuttons	ended		Black	0C-11B	0C-11B		Metallic bezels covered with a rubber boot to enhance waterproof characteristics.
APEM Switches &			Nitril rubber	Red	0C-11R	0C-11R		• Button is not included. Applicable to extended pushbuttons only.
Pilot Lights Control Boxes			Bezel: diecast zinc	Green	0C-11G	0C-11G	1	 Oil-proof Operating temperature: -5 to +60°C.
Emergency Stop Switches								<mark>≪ ∕⁄ ø38 →</mark> / M30 P1.5
Enabling Switches	Fc	or TWN/TWND		Yellow	0C-11Y	0C-11Y		
Safety Products Explosion Proof		For flush		0C-121	I	0C-121	1	Used to cover and protect push- buttons where units are subject A
Terminal Blocks		pushbuttons	EPDM rubber					to water splash. Not suitable for outdoor use or where the units are subject to oil splash.
Relays & Sockets Circuit Protectors	8	For extended pushbuttons		0C-122		0C-122	1	Part No. A B 0C-121 37 16 0C-122 37 22
Power Supplies	For TWN/TWND Dust-proof Rubber Co							Used for ABN4G and ABGD4 Panel Thickness
LED Illumination	for Jumbo Mushroom	15						pushbuttons.
Controllers	For TWN/TWNE		Nitril rubber (black)	OC-4GI	N	OC-4GN	1	
Interfaces								
Sensors AUTO-ID	Padlock Cover							• Used to protect pushbuttons and illuminated pushbuttons (momentary/maintained) with 24 mm max. height from the panel,
Flush Silhouette ø16 ø22 ø30 Miniature Pilot Lights			Polyarylate (gasket: nitryl rubber)	OL-KL1		OL-KL1	1	and selector switches (knob operator). • Not used for the following models. <u>Pushbuttons</u> Mushroom with full shroud <u>Jumbo mushroom with shroud</u> <u>Illuminated</u> <u>Outside diameter: e50</u> <u>Pushbuttons</u> <u>Inside diameter: e50</u> <u>Pushbuttons</u> <u>Inside diameter: e44</u> With half shroud <u>Selector Switches</u> Lever operator Key selector switch with key installed
TWN TWND ARN CS	Padlock Cover for Key Selector Switche	es	Metal Paint: red (zinc-plated brass)	HS9Z-F	PC30	HS9Z-PC30	1	• Applicable model <u>Key selector switches ASN□K/ASD□K</u> See padlock cover catalog for operating instruction. ^{1.6} ^{1.6} ^{1.}
	For Flush Pushbuttons							 Used to protect flush pushbuttons from inadvertent operation. Can be easily attached using the locking ring.
	Fc	br TWN/TWND	Metal (zinc-plated brass)	OL-C		OL-C	1	support of the rest of the res

All dimensions in mm.

				1	1		울
Shape		Material	Part No.	Ordering No.	Package Quantity	Remarks	ilot Lights
Metallic Bezel							S S
		Motol					APEM
		Metal (diecast zinc:	0G-11	0G-11PN02	2	 Cannot be used with pin lock, selector pushbuttons, and monolever 	APEM Switches &
		chrome-plated)				units.	Pilot Lights
ø35/ø26, height 9 F	or TWN/TWND						Control Boxes
Plastic Bezel							Stop Switches Enabling
						 Specify a color code in place of *. 	Switches
		Polycarbonate	0GP-11*	0GP-11*PN02	2	B (black), G (green), R (red), W (white), Y (yellow)	Safety Products
		Torycarbonate	our-rr*	001-11-1102	2	 Cannot be used with pin lock, selector 	Explosion Proof
						pushbuttons, and monolever units.	Terminal Blocks
ø35/ø26, height 9 Ostagonal Matal Rozal	For TWN						Relays & Sockets
Octagonal Metal Bezel	1						Circuit Protectors
0	Flush W35		0G-81	0G-81PN02	2		Power Supplies
	(37.6) H9	Metal				 Use with TWDN series diecast zinc 	LED Illumination
		(diecast zinc:				switches and pilot lights.	Controllers
	② Extended	chrome-plated)				 Cannot be used with half-shrouds. 	Operator Interfaces
	W35 (37.6)		0G-82	0G-82	1		Sensors
For TW	H16						AUTO-ID
Clear Plastic Shroud for Flush P							
		Acrylic (clear)	0GP-13	0GP-13PN02	2		
							Flush Silhouette
					-		ø16
	5 7444						ø22
ø35, height 14 Clear Plastic Shroud for Extende	For TWN					Clear plastic full shroud.	ø30
							Miniature
		Acrulia (clear)	0CD 14	000 140000			Pilot Lights
\sim		Acrylic (clear)	0GP-14	OGP-14PN02	2		
	*						
ø35, height 20.6 Clear Plastic Shroud for Illuminate	For TWN						TWN
Gigar Flastic Shrouu for Inuminate	น คนอาเมนแบบไร						TWND
							ARN
-]	Acrylic (clear)	0GP-1411	0GP-1411	1	 Buttons may protrude slightly depending on the panel thickness. 	CS
Shroud: ø35, height 20.6							
Metal Nut Ring: height 4 For TWN Metal Nut Ring for Illuminated Pushbuttons							
	Matal						
\bigcirc		(diecast zinc)	0L-11	OL-11PN05	5	 Metal nut ring for OGP-1411 only. 	
ø35, height 4	For TWN						

Accessories

ot Lights	S	hape	Material	Part No.	Ordering No.	Package Quantity	Color Code *
S	Button for Pushbuttons	① Flush ø24.6, height 4		ABN1BN-*	ABN1BN-*PN05	5	
APEM Switches &		② Extended ø24.6, height 9		ABN2BN-*	ABN2BN-*PN05	5	B (black), G (green), R (red), Y (yellow), S (blue), W (white)
Pilot Lights Control Boxes Emergency	3	③ Mushroom ø40, height 16.2	Polyacetal	ABN3BN-*	ABN3BN-*PN02	2	
Stop Switches Enabling Switches	4	④ Jumbo Mushroom ø65, height 23.2		ABN4BN-*	ABN4BN-*	1	B (black), G (green), R (red), Y (yellow), S (blue)
Safety Products Explosion Proof	5	© Button for Pin Lock (ABD8P) ø23.6, height 3		ABW1B-*	ABW1B-*PN05	5	B (black), G (green), R (red), Y (yellow), S (blue), W (white)
Terminal Blocks Relays & Sockets		© ø40 Pushlock Turn Reset (AVN3, AVD3)		AVN3B-*	AVN3B-*	1	R (red),Y (yellow)
Circuit Protectors Power Supplies	0	Ø40, height 18.5 Ø Ø40 Push Turn Lock	AS resin				B (black), G (green), R (red),
LED Illumination	For TWN/TWND	(AJN3, AJD3) ø40, height 18.5		AJN3B-*	AJN3B-*	1	Y (yellow)
Controllers Operator Interfaces Sensors	Lens for Illuminated Pushbuttons	 Extended (ALN2, ALD2) ø24, height 18.5 	AQ	ALN2LD-*-K	ALN2LD-*-KPN05	5	R (red), G (green), S (blue), Y (yellow), A (amber), W (white) Specify W for PW (pure white) illumination.
AUTO-ID	² For TWN/TWND	 Ø40 Pushlock turn reset (AVLN3, AVLD3) ø40, height 18.5 	AS resin	AVLN3L-R-K	AVLN3L-R-KPN02	2	R (red) only
Flush Silhouette	Selector Operator	① Knob operator ø25, height 20.5		ASNHT-*	ASNHT-*PN02		B (black), G (green), R (red)
ø22 ø30		 ② Lever operator ø25, height 20.5, length 37.5 	Polyacetal	ASNHL-*	ASNHL-*PN02	2	
Pilot Lights	3	③ Color insert Width 21, depth 5, height 18		TW-HC1*	TW-HC1*PN05	5	B (black), G (green), R (red), Y (yellow), S (blue), W (white)
TWN	For TWN/TWND	 ④ Knob for illuminated selector switch (ASLN, ASLD) ø25, height 28 	AS resin	ASLNHD-*-K	ASLNHD-*-K	1	G (green), R (red), S (blue), A (amber), W (white), Y (yellow) Specify W for PW (pure white) illumination.
ARN	Lens for Pilot Lights	① Round (APN1, APD1) ø24.8, height 28, M20 For TWN/TWND		APN106LN-*-K	APN106LN-*-KPN05	5	R (red), G (green), Y (yellow) A (amber), W (white), S (blue) Specify W for PW (pure white) illumination.
	2	© Rectangular (UPQN4) Width 36, depth 30, height 8.5	AS resin	UPQN406LD-*-K	UPQN406LD-*-KPN05	5	R (red), G (green), Y (yellow), A (amber), C (clear), S (blue) Specify C for PW (pure white) illumination.
	3	For TWN ^③ Square extended (UPQN3B) □25, height 26.5 For TWN		UPQN06LD-*-K	UPQN06LD-*-KPN05	5	R (red), G (green), S (blue), Y (yellow), A (amber), W (white) Specify W for PW (pure white) illumination.
	Marking Plate For TWN	Rectangular pilot lights (UPQN4) Width 29.8, depth 23.8, thickness 2	Acrylic	UPQN406N-W	UPQN406N-WPN05	5	W (white) only See <mark>B-346</mark> for engraving area.

Maintenance Parts

All dimensions in mm.

Rubber Westher (1.5 mm-Thick) Rubber (soft winy)	Shape	Material	Part No.	Ordering No.	Package	Remarks	Pilot Lights
Nobber Syntact Rubber (stylettet: soft viny) style236, height 1.5. OW-11 OW-11Ph10 10 To tighten mounting panels AP Bubber (S0 mm-thick) (syntact: soft viny) style235, height 20.5. Bubber (syntact: soft viny) style235, height 20.5. OW-12 OW-12Ph10 10 To tighten mounting panels In the style 20.5.				j ··	Quantity		nts
Number (S0 mm-thick) (synthetic soft viny) (synthetic sof		(synthetic soft vinyl)	OW-11	OW-11PN10	10	• To tighten mounting panels	АРЕМ
Operation Bubber (struct) for Pushbuttons Bubber (struct) for Pushbuttons OW-12 OW-12PN10 10 • To tighten mounting panels Corr (struct) (struct) (struct) (struct) for Pushbuttons OW-12 OW-12PN10 10 • To tighten mounting panels Corr (struct) (Switches & Pilot Lights
Image: Second		(synthetic soft vinyl)	0W-12	OW-12PN10	10	• To tighten mounting panels	Control Boxes Emergency Stop Switches
① O Half shroud ABN2G ABN2G 1 • With nut ring (ø35, height 4) Si ② ③ G G G Full shroud ABN2G ABN2F 1 • With nut ring (ø35, height 4) Si ③ ④ G Full shroud ABN2F ABN2F 1 • Full shroud Full shroud <t< td=""><td><u> </u></td><td></td><td></td><td></td><td></td><td></td><td>Enabling Switches</td></t<>	<u> </u>						Enabling Switches
Image: Control of the second secon			ABN2G	ABN2G	1	• With nut ring (ø35, height 4)	Safety Products
Image: Constraint of the set of the	-						Terminal Blocks
3 Image: Second Sec			ABN2F	ABN2F	1		Relays & Sockets
Image: Construction of the second		035/026.5, neight 16.5					Circuit Protectors
Image: Second		③ Full shroud					Power Supplies
•48, height 20 •48, height 20 •648, height 20 •648, height 20 •648, height 20 •65 •65 •65 •65 •65 •65 •65 •65 •65 •65 <		(for mushroom	ABN3G	ABN3G	1		LED Illumination
Image: Solution of the problem of t						-	Controllers
Image: Construction of product of p							Operator Interfaces
Image: Solution of the solution		(for jumbo mushroom)	ABN4G	ABN4G	1		Sensors
For TWN/TWND (for jumbo mushroom) o75/ø69, height 33 ABN4F ABN4F 1 Image: Constraint of the state of the st		· · · · · · · · · ·				-	AUTO-ID
For TWN/TWND O ALN2GL ALN2GL 1 With nut ring (ø35, height 4) 0 0 0 0 ALN2GL ALN2GL 1 With nut ring (ø35, height 4) 0 0 0 0 0 0 ALN2GL ALN2GL 1 With nut ring (ø35, height 4) 0 0 0 0 For TWN/TWND 0 ALN2FL ALN2FL 1 With nut ring (ø35, height 4) 0 0 0 For TWN/TWND 0 Full shroud (For BA9S base) ø35/ø29.5, height 22.5 ALN2FL ALN2FL 1 With nut ring (ø35, height 4) 0 pare Key or Key Selector Switches Metal Nickel plated brass Length 3, width 19.7, thickness 1.8 TW-SK-0 TW-SK-0PN02 2 ASN□K□N 0 pare Key or Key Selector Switches Metal Nickel plated brass Length 3, sidth 19.7, thickness 2 TW-SK-24401 ASN-SK-24401PN02 2 ASN□K□-N024401 AR m// Chain Kit or ABD8P Pin: ADD8P DIM ADD8P DIM 1 Pin, chain, and plate for ABN8P	(1	(for jumbo mushroom)	ABN4F	ABN4F	1		
① ① Half shroud (For BA9S base) ø35/ø27, height 25 ALN2GL ALN2GL 1 •With nut ring (ø35, height 4) 92 · Ø Full shroud (For BA9S base) ø35/ø29.5, height 25. ALN2FL ALN2FL 1 •With nut ring (ø35, height 4) 92 ipare Key or Key Selector Switches · Metal Nickel plated brass Length 3, width 19.7, thickness 1.8 TW-SK-0 TW-SK-0PN02 2 •ASN□K□N AR ipare Key or Key Selector Switches · Metal Nickel plated brass Length 3, sidth 19.7, thickness 2 TW-SK-0 TW-SK-0PN02 2 •ASN□K□N AR · Pin Netal Nickel plated brass Length 37.5, thickness 2 ASN-SK-24401 ASN-SK-24401PN02 2 •ASN□K□-N024401 AR · Pin: APPER PIN APPER PIN APPER PIN •Pin, chain, and plate for ABN8P	For TWN/TWND	ø/5/ø69, height 33					Flush Silhouette
Image: Constraint of the constraint		① Half shroud					ø16
For TWN/TWND Image: Constraint of the second se		(For BA9S base)	ALN2GL	ALN2GL	1	With nut ring (ø35, height 4)	ø22
For TWN/TWND For TWN/TWND For TWN/TWND ALN2FL ALN2FL ALN2FL 1 • With nut ring (ø35, height 4) Pile pare Key or Key Selector Switches Metal Nickel plated brass Length 3, width 19.7, thickness 1.8 TW-SK-0 TW-SK-0PN02 2 • ASN□K□N TW-SK-0PN02 1 • ASN□K□N 1 • ASN□K□N 1 • ASN□K□N TW-SK-0PN02 1 • ASN□K□N 1 • ASN□K□N 1 • ASN□K□N 1 • ASN□K□N 1 • ASN□K□-N024401 1 • ASN□K□-N024401 1 • Pin, chain, and plate for ABN8P 0 • Pin, chain, and plate for ABN8P • ABN2P • ABN2P • ABN2P • Pin, chain, and plate for ABN8P • Pin, chain, and plate for ABN8P • ABN2P <td< td=""><td></td><td>ø30</td></td<>							ø30
Pile Ø35/Ø29.5, height 22.5 Pile Pile pare Key Metal Nickel plated brass Length 3, width 19.7, thickness 1.8 TW-SK-0 TW-SK-0PN02 2 • ASN□K□N pare Key For TWN/TWND Metal Nickel plated brass TW-SK-0 TW-SK-0PN02 2 • ASN□K□N Metal pare Key For TWN/TWND Metal Nickel plated brass ASN-SK-24401 ASN-SK-24401PN02 2 • ASN□K□-N024401 ASN in/Chain Kit For TWN Pin: APD2P_PIN APD2P_PIN 1 • Pin, chain, and plate for ABN8P	(1		ALN2FL	AI N2FI	1	• With nut ring (ø35. heiaht 4)	Miniature
Metal Nickel plated brass Length 3, width 19.7, thickness 1.8 TW-SK-0 TW-SK-0PN02 2 • ASN□K□N ASD□K□N TW-SK-0PN02 pare Key or Key Selector Switches For TWN Metal Nickel plated brass Length 37.5, thickness 2 Metal Nickel plated brass Length 37.5, thickness 2 ASN-SK-24401 ASN-SK-24401PN02 2 • ASN□K□-N024401 AR CS m/Chain Kit or ABD8P Pin: ABD8P ABD8P ABD8P 1 • Pin, chain, and plate for ABN8P		ø35/ø29.5, height 22.5				· · · · · · · · · · · · · · · · · · ·	Pilot Lights
Nickel plated brass Length 3, width 19.7, thickness 1.8 TW-SK-0 TW-SK-0PN02 2 • ASN□K□N TW-SK-0PN02 pare Key or Key Selector Switches Metal Nickel plated brass Length 37.5, thickness 2 Metal Nickel plated brass Length 37.5, thickness 2 ASN-SK-24401 ASN-SK-24401PN02 2 • ASN□K□-N024401 AR In/Chain Kit or ABD8P Pin: APP2P PIN APP2P PIN 1 • Pin, chain, and plate for ABN8P	elector Switches						
For TWN/TWND thickness 1.8 Mail Association		Nickel plated brass Length 3, width 19.7,	TW-SK-0	TW-SK-0PN02	2		TWN
pare Key Metal Metal Metal ASN-SK-24401 ASN-SK-24401PN02 2 • ASN□K□-N024401 AR In/Chain Kit For TWN Pin: ABD8P PIN ABD8P PIN • Pin, chain, and plate for ABN8P	t	thickness 1.8					TWND
Notest plated brass Length 37.5, thickness 2 ASN-SK-24401 ASN-SK-24401PN02 2 • ASN□K□-N024401 Vin/Chain Kit or ABD8P Pin: ABD8P PIN ABD8P PIN • Pin, chain, and plate for ABN8P	/						ARN
For TWN Length 37.5, thickness 2 iin/Chain Kit or ABD8P Pin:	N N	Nickel plated brass	ASN-SK-24401	ASN-SK-24401PN02	2	● ASN□K□-N024401	CS
in/Chain Kit or ABD8P Pin: APD9D PIN APD9D PIN 1 • Pin, chain, and plate for ABN8P	1	Length 37.5, thickness 2	700 00 24401	NON ON LTTOIL NUL	L		
Pin: APDRD DIN APDRD DIN 4 Pin, chain, and plate for ABN8P							
		Pin				• Pin chain and plate for APNOD	
Nickel plated brass		Nickel plated brass	ABD8P-PIN	ABD8P-PIN	1	 Pin, chain, and plate for ABN8P Pin (ø4.6) 	
For TWND							
ontact Block Plug	lock Plug						
Polyamide HW9Z-CBPL HW9Z-CBPLPN10 10 • Used to plug the hole in the center of a contact block.	P	Polyamide	HW9Z-CBPL	HW9Z-CBPLPN10	10		
For TWN/TWND	For TWN/TWND						

Maintenance Parts

-+								
ot Lights	Shape	Description	Part No.	Ordering No.	Package Quantity	Remarks		
05	Contact block	NO contect	HW-U10	HW-U10	4	Housing color: Blue		
	HW-U	NO contact	HW-U10-MAU	HW-U10-MAU	1	Push rod color: Green MAU has gold contacts		
APEM		NC contact	HW-U01	HW-U01	- 1	Housing color: Reddish purple Push rod color: Red		
Switches &		NG COMACI	HW-U01-MAU	HW-U01-MAU	I	MAU has gold contacts		
Pilot Lights		EM contact	HW-U10R	HW-U10R		Housing color: Blue		
Control Boxes		(early make)	HW-U10R-MAU	HW-U10R-MAU	1	Push rod color: Black MAU has gold contacts		
Emergency Stop Switches		LB contact	HW-U01R	HW-U01R	- 1	Housing color: Reddish purple Push rod color: White		
Enabling Switches	For TWN/TWND, 11g approx.	(late break)	HW-U01R-MAU	HW-U01R-MAU		MAU has gold contacts		
Safety Products	Dummy Block					 For HW-U contact blocks 		
Explosion Proof	For TWN/TWND	Polyamide	HW-DB	HW-DBPN10	10	• Used when the number of contact blocks and full voltage adapters is 1 or 3.		
Terminal Blocks	3.5g approx.							
Relays & Sockets Circuit Protectors	Full Voltage Adapter For Illuminated Switches (*1)	Polyamide	HW-GA1N	HW-GA1NPN02	2	 Applicable model: Illuminated pushbuttons Illuminated selector switches Applicable load (LED lamp) 		
Power Supplies	For TWN/TWND					LSRD-6, LSTD-6 (6V AC/DC) LSRD-1, LSTD-1 (12V AC/DC)		
LED Illumination	12g approx.					LSRD-2, LSTD-2 (24V AC/DC)		
Controllers	Transformer Unit For Illuminated Switches (*1)	100/110V AC	HW-T16	HW-T16	1	Applicable model: Illuminated pushbuttons		
Operator Interfaces	For TWN/TWND	200/220V AC	HW-T26	HW-T26	1	 Illuminated selector switches Applicable load (LED lamp) 		
Sensors	66g approx.	200/2201110	1111 120	1111 120		LSRD-6, LSTD-6 (6V AC/DC)		
AUTO-ID	Transformer Unit For Pilot Lights (*1)	100/110V AC	TWR-016B	TWR-016B	1	 Mounting screws are not included. See B-347 for mounting screws. 		
	For TWN/TWND 69g approx.	200/220V AC	TWR-026B	TWR-026B	1	Applicable load (LED lamp) LSRD-6, LSTD-6 (6V AC/DC)		

Flush Silhouette

*1) For use as maintenance parts. Do not use for expansion or remodelling purposes.

LED Lamps (Use LED lamps for replacing incandescent lamps)

ø16	LED Lamps (Use LED lamps for replacing incandescent lamps)													
ø22	Model	Operating	Curren	nt Draw	Part No.	Ordering No.	Color Code	Package	Base					
ØZZ	WIDGOI	Voltage	DC	DC	Tarrivo.	ordening No.		Quantity	Dasc					
ø30	LSRD	6V AC/DC	10mA	14mA	LSRD-6	LSRD-6		1						
Minister		00 40/00	TUTIA	1411A	LOND-0	LSRD-6PN10		10						
Miniature	32	12V AC/DC	DC 7mA	8mA LSRD-1 ⊢		LSRD-1		1	BA9S					
Pilot Lights	6	12V A0/D0	7 IIIA		LSRD-1PN10	_	10	/13						
		24V AC/DC	7mA	8mA	LSRD-2	LSRD-2		1						
		24V AC/DC		OIIIA	LonD-2	LSRD-2PN10		10						
	LSTD	01/ 40/20	7mA (R, A)	8mA (except S) 7mA (S)	· · · /	,		,	.5mA (G, PW) 8mA (except S) L		LSTD-6*		1	
TWN		6V AC/DC	6V AC/DC 5.5mA (G, PW) 4.5mA (S)							LSTD-6*	LSTD-6*PN10		10	
TWND	0.7		10mA (except S)	11mA (except S)		LSTD-1*	R, G, A, S, PW	1	BA9S					
ARN	12V AC/DC 8mA (S) 9mA (S)		9mA (S)	LSTD-1*	LSTD-1*PN10		10	/13						
		0.41/ 4.0/00	10mA (except S)	11mA (except S)		LSTD-2*		1						
CS		24V AC/DC	8mA (S)	9mA (S)	LSTD-2*	LSTD-2*PN10	1	10						

• Only one color is available for LSRD so there are no codes to specify the color in the part no.

Specify a color code in place of * in Part No. R (red), G (green), A (amber), S (blue), PW (pure white)
Use a PW (pure white) LED for Y (yellow) illumination.

IDEC

• When replacing the LED with LSRD, the lens must also be replaced (see B-341).

Maintenance Parts

Transformer

Shape

LED lamps for replacing incandescent lamps

Incandescent Lamp										
	Model (mm)	Part No.	Operating Voltage	Lamp Rating	Base					
LS		LS-6	6V AC/DC	1W (6V)						
	- it o	LS-8	12V AC/DC	1W (18V)	BA9S					
	Bulb: Ø11	LS-2	18V AC/DC	1W (24V)	/13					
	Length: 23	LS-3	24V AC/DC	1W (30V)]					

	Replacement LED Lamp							
	Part No.	Color Code	Operating Voltage	Base				
	LSRD-6		6V AC/DC					
	LSRD-1		12V AC/DC	BA9S				
	LSRD-2	_	24V AC/DC	/13				
	LSRD-2		24V AC/DC					

• Only one color is available for LSRD so there are no codes to specify the color in the part no.

• When replacing incandescent lamps to LSRD, the lens must also be replaced (see B-341).

Operating Voltage

 When using a commercially available incandescent lamp, choose a lamp with the same dimensions, operating voltage, and base.

 Specify a color code in place of * in Part No. R (red), G (green), A (amber), S (blue), PW (pure white)

• Use a PW (pure white) LED lamp for Y (yellow) illumination.

• For 0 (orange) and C (clear) color code of incandescent lamp, use A (amber) LED lamp.

Applicable Load

Switches & Pilot Lights

APEM

Control Boxes

Emergency Stop Switches Enabling Switches

Safety Products

Explosion Proof Terminal Blocks elays & Sockets rcuit rotectors

ower Supplies

ED Illumination

ontrollers

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ensors

Flush Silhouette

ø16

	•			(Ordering No.)		Relays & So
	For 6V	100/110V AC	±10%	TWR516	LSRD-6, LSTD-6* (6V AC/DC, LED lamp)	Circuit Protectors
		200/220V AC	±10%	TWR526	Specify a color code in place of $*$ in Part No. \neg R (red), G (green), A (amber), S (blue),	Power Sup
		400/440V AC	±10%	TWR546	PW (pure white)	LED Illumir
	For 24V	100/110V AC	±10%	TWR512	LSRD-2, LSTD-2* (24V AC/DC, LED lamp)	Controllers
		200/220V AC	±10%	TWR522	Specify a color code in place of $*$ in Part No.	Operator Interfaces
		400/440V AC	±10%	TWR542	R (red), G (green), A (amber), S (blue), PW (pure white)	Sensors
	Terminal cover (TWB-VI 3) is installe		AUTO-ID			

Voltage Range

Part No.

• Terminal cover (TWR-VL3) is installed on transformers as standard.

Specifications

Part No.	TWR5⊡6	TWR5□2		
Rated Voltage	100/110V AC, 200/220V AC, 400/440V AC (50/60 Hz)			
Current Draw	2.4VA			
Rated Insulation Voltage	600V			
Insulation Resistance	100MΩ minimum (500V DC	megger)		
Operating Temperature	-30 to 60°C (no freezing)			
Operating Humidity	35 to 85% RH (no condensa	tion)		
Storage Temperature	-40 to +80°C (no freezing)			
Vibration Resistance	Damage limits: 30 Hz, amplitude 1.5 mm			
VIDIATION RESISTANCE	Operating extremes: 5 to 55 Hz, amplitude 0.5 mm			
Shock Resistance	1000 m/s ²			
Shock Resistance	100 m/s ²			
Dielectric Strength	2500V AC, 1 minute			
Terminal Screw	M3.5			
Applicable Wire	2 mm ² maximum, 2 wires maximum			
Weight	87g			

Accessories

Shape	Material	Part No.	Ordering No.	Package Quantity	Dimensions (mm)
DIN 35 mm Rail Weight: 200g approx.	Aluminum Length: 1000 mm	BAA1000	BAA1000PN10	10	
End Clip Weight: 15g approx.	Metal (zinc-plated steel) Applicable rail: BAA1000	BNL6	BNL6PN10	10	M4 screw

• See H-071 for DIN rail products.

Dimensions

M3.5 Terminal Screws Primary Side Secondary Side 2-ø3.3 Mounting Hole Terminal Cover

A

BAA1000



All dimensions in mm.

ARN

CS

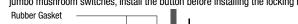
Safety Precautions

- Turn off the power to the TWN/TWND switches & pilot lights before starting installation, removal, wiring, maintenance, and starting installation, removing, wiring, maintenance, and inspection of the products. Failure to turn power off may cause electrical shocks or fire hazard.
- To avoid a burn on your hand, use the lamp holder tool when replacing lamps.
- . For wiring, use wires of a proper size to meet the voltage and current
- requirements. Tighten the terminal screws to the recommended tightening torque (see B-349). Failure to tighten terminal screws may cause overheat and fire

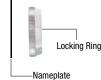
Operating Instructions

Panel Mounting

- 1. Remove the locking ring from the operator and check that the rubber gasket is in place. For mushroom and jumbo mushroom switches, remove the button before removing the locking ring.
- 2. Adjust the thickness of the rubber washers according to the panel thickness. 3. Insert the switch into the panel from the back of the panel.
- 4. On the panel front, install the nameplate and locking ring. For mushroom and jumbo mushroom switches, install the button before installing the locking ring.







Panel Thickness and Rubber Washer

washers according to the panel thickness as shown in the tables below. Also, make sure to include the nameplate thickness when using a nameplate.



TWN/TWND series

ø16 Pushbutton (flush/extended/mushroom/jumbo mushroom) ø22 Illuminated pushbutton (extended/mushroom)

Pilot light (except for square type) **Rubber Washer** Pane

mickness (mm)	1.5 mm-thick	3.0 mm-thick
Supplied	2 pieces	1
0.8 to 3.5	2 pieces	1
3.5 to 5.0	1	1
5.0 to 6.5	-	1
6.5 to 7.5	1	-



CS

TWN/TWND series Pushbutton (extended with half shroud)

Illuminated pushbutton (extended with half shroud) ARN

Panel	Rubber Washer		
Thickness (mm)	1.5 mm-thick	3.0 mm-thick	
Supplied	1	1	
0.8 to 1.8	-	1	
1 8 to 3 5	1	_	

TWN/TWND series

Pushbutton (extended with full shroud)

Panel	Rubber Washer		
Thickness (mm)	1.5 mm-thick	3.0 mm-thick	
Supplied	2 pieces	1	
0.8 to 2.5	2 pieces	1	
2.5 to 4.0	1	1	
4.0 to 5.5	-	1	
5.5 to 6.0	1	-	

• See B-324 for square pilot lights about installing on the panel and replacing LED lamps. . The number of rubber washers shown in the dimensions of TWN/TWND series may differ from the number of rubber washers supplied.

Notes for Panel Mounting

Locking ring wrench

lamp is used.

Locking ring wrench recommended torque

Tighten the bezel to a tightening torque of 3.0 to 3.5 N·m.

When using a commercially available lamp, choose a lamp with rated voltage

sure of correct operation before installation. The operation of illuminated

pushbutton switches cannot be guaranteed when a commercially available

5 to 30V AC/DC and 1W maximum, and with the same base and shape. Make

Locking ring wrench (OR-12) В

Locking ring wrench (OR-12) can be used to tighten the bezel. Use side B to tighten. Side B: For TWN/TWND series Side A: TWS series

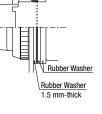


Panel

Installing the Anti-rotation Ring (OGL-11)

Anti-rotation rings are used on selector switches or pushbuttons which rotate and used when using no nameplates. Insert a 1.5 mm-thick rubber washer between the panel and the anti-rotation ring as shown on the right.

To install, adjust the panel thickness by taking the thickness of anti-rotation ring (OGL-11) into consideration.



ll h

Anti-rotation Ring OGL-11 (0.8 mm)

Replacement of LED Lamps

Lamps can be replaced by using the lamp holder tool (OR-55) from the front of the panel. (See B-338 for lamp holder tool.)

How to Remove

To remove, slip the lamp holder tool onto the lamp head lightly. Then push slightly, and turn the lamp holder tool counterclockwise.



How to Install

To install, insert the lamp head into the lamp holder tool. Place the two pins on the lamp base to the grooves in the lamp socket. Inset the lamp and turn it clockwise.



Adjust the thickness of the rubber

Panel

Miniature Pilot Lights





APEM

Control Boxes

Emergency Stop Switches Enabling

Switches

Safety Products

Explosion Proof

Terminal Blocks

Relavs & Sockets

LED Illumination

Controllers

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Flush Silhouette

Circuit Protectors Power Supplies

Rubber Gasket

Illuminated pushbutton (extended w/full shroud)

2 pieces

2 pieces

1

1

2 pieces

2 pieces

1

1

2 pieces

2 pieces

1

*1: (6.5) is for mushroom pushbuttons with full shroud

Rubber Washer

1.5 mm-thick 3.0 mm-thick

Rubber Washer

1.5 mm-thick 3.0 mm-thick

Rubber Washer

.5 mm-thick 3.0 mm-thick

1

1

1

1

1

1

1

1

TWN/TWND series

Panel

Thickness (mm)

Supplied

0.8 to 3.5

2.0 to 3.5

3.5 to 5.0

5.0 to 6.0 (6.5)*

TWND series

Pin lock pushbutton

Panel

Thickness (mm)

Supplied

0.8 to 3.0

3.0 to 4.5

4.5 to 6.0

6.0 to 7.5

Panel Thickness (mm)

Supplied

0.8 to 3.5

3.5 to 5.0

5.0 to 6.5

6.5 to 7.5

TWN/TWND series

Other models (excluding square)

Mushroom with full shroud

Installing/Removing the Buttons and Lenses

To install

Pushbutton button

Flush/Extended Push in the button to install.



To remove

Notches on the operating shaft

The operating shaft has four notches as shown at right. Insert a flat screwdriver (3 mm max.) into one of the notches, and tilt the screwdriver to remove the button.



-Notches

Make sure to insert a flat screwdriver into one of the notches, otherwise the pushbutton may be damaged.

Notes on button removal

To avoid damaging the bezel or the button, remove the bezel from the pushbutton before inserting a flat screwdriver.

Mushroom/

Jumbo Mushroom Button has threads. Turn clockwise to install the button.

Turn the button counterclockwise to remove.

Illuminated Pushbutton Lens

Extended/Mushroom Lens has threads. Turn clockwise to install the lens.





Pilot Light Lens Round

Lens has threads. Turn clockwise to install the lens.





A rubber gasket is installed between the lens and operator on pilot lights. Make sure that the rubber gasket is in place when installing the lens.

Marking Plate on Pilot Lights

Rectangular Marking Plates (for UPQN4)

Removina

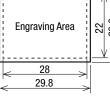
① Insert a flat screwdriver between the lens and bezel, and tilt the screwdriver to remove the lens.



Engraving Area

Material: Acrylic resin Size: 29.8 W × 23.8 D, thickness 2.0 mm Engraving area: $28 \text{ W} \times 22 \text{ D} \times 1.0 \text{ mm}$ height max.

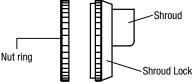




Installing the Half Shroud on Extended Pushbuttons/ Illuminated Pushbuttons

Half Shroud Parts

A shroud is installed in the shroud locking ring. Tightening the shroud locking ring in the switch locks the shroud.



Shroud Locking Ring

Installing the Half Shroud

- ① Adjust the thickness of the rubber washers according to the panel thickness (see B-345).
- ② Insert the switch into the panel from the back of the panel.
- ③ Install the nut ring from the panel front to tighten the switch.
- ④ Install the half shroud on the upper side of the switch, and tighten the shroud locking ring.
- ⁽⁵⁾ Make sure that the shroud is securely fastened inside the shroud locking ring.

Tightening the Half Shroud

Align the three projections on the shroud with the groove on the switch, and tighten the shroud on the upper side of the switch. Tighten the shroud locking ring.

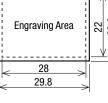
(1) Three projections (2) Grooves on the threads (3) Complete on the shroud TOF Grooves on the threads (The shroud is installed in (Four grooves on up, the shroud locking ring.) down, right, and left)

- Shrouds may rattle depending on the panel thickness.
- A gap may appear between the nut ring and the shroud locking ring depending on the panel thickness.

② A white marking plate is installed in the lens which can be removed APEM



easily





Miniature Pilot Lights

ARN

B-346

CS

Control Boxes

Stop Switches

Safety Products

Explosion Proof

Terminal Blocks

Relavs & Sockets

LED Illumination

Controllers

Operator

Interfaces

Sensors

AUTO-ID

Circuit

Protectors Power Supplies

Emergency

Enabling

Switches

Turn the lens counterclockwise to



Operating Instructions

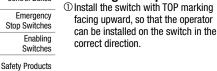
Selector Switches

Turn the operator such as knob, lever, and key to each position accurately. Releasing halfway may cause the operator to return to the former position, or to get stuck between. On spring return two-way types, the center of operators may be misaligned slightly.

Key Selector Switches

Insert the key completely before turning. Failure to do so may cause failures.

Installing the Operator on Selector Switches Control Boxes





Color Insert

TOP" marking

45° 3-position

2 On non-illuminated models, install the Terminal Blocks color insert in the middle of operator. The color insert also serves to retain Relavs & Sockets the operator. Circuit

> 3 On illuminated models, align the operator with the switch by confirming the TOP marking on the switch and also the switch operation. Then press in the operator into the switch.



Installation of Selector Operators

The shaft of each non-illuminated selector switch has a recess to identify in which direction to install the operator. Align the operator with the recess and press in the operator. Press a color insert (non-illuminated) into the operator (illuminated selector switches do not have a recess on the shaft).





90° 2-position

The non-illuminated operators can be installed in positions other than the standard position shown above





Standard positions

Removal

Removing the Operator from Selector Switches



 Insert a flat screwdriver into the recess under the color insert. Turn the screwdriver to push out the insert from the operator.



② Pull out the operator sideways as shown in the left photo to remove the operator.

Removing the Operator from Illuminated Selector Switches



- ① Insert a flat screwdriver (4 to 5 mm) into the recess at right or left under the operator and tilt. The operator is displaced slightly.
- ② Insert the flat screwdriver into the other recess and tilt. The operator can be removed.

Removing the Contact Blocks/Full Voltage Adapters

Insert a flat screwdriver (4 to 6 mm) into the snap-fit latches of the contact block or full voltage adapter and lift to remove.



- Make sure to lift both latches. Contact blocks cannot be removed by lifting one latch only.
- · Do not apply excessive force to the latches, otherwise damage maybe caused.

Transformer Units and DC-DC Converters

Insert the end of the contact block removal tool (TW-KC1) into the snap-fit latch of the transformer units or DC-DC converter and pull the tool forward. The contact block removable tool cannot be used to remove the HW-U contact blocks or full voltage adapters.



🗥 When replacing parts (contact block, dummy block, full voltage adapter, transformer) for maintenance, make sure to install the parts to the original position. Otherwise proper operation cannot be guaranteed

Transformer Units and DC-DC Converters for Pilot Lights

Unfasten the two mounting screws on the back to remove the transformer unit/ DC-DC converter.



Mounting screws APN: M3 × 6 (screw diameter ø5.5 or below) APD: M3.5 × 6 (screw diameter ø5.5 or below)

APEM

Explosion Proof

Protectors

Power Supplies

LED Illumination

Controllers

Operator

Sensors

AUTO-ID

Flush Silhouette

ø16

ø22

ARN

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Interfaces

IDEC

Operating Instructions

Applicable Wiring

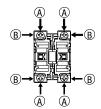
(1) Contact Block 0.3 to 3.5 mm² (solid wire 0.5 to 2.0 mm)

Pushbutton/illuminated pushbutton/selector switch/ illuminated selector switch/selector pushbutton

(A) and (B) show the wiring direction to the terminals.

<Contact Block>

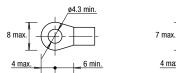
Terminal screws M3.5 (spring-up)



Applicable Crimping Terminal

Be sure to use an insulation tube or cover on the crimping part of the crimping terminal to prevent electrical shocks.

Crimping terminal for (A)



IP20 crimping terminal

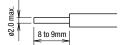


Crimping terminal for B

IP20 crimping terminal ø3.6 min.







 Strip the wire insulation 8 to 9 mm from the end. Insert the wire until the insulation comes into contact

3.6 min.

6 min

with the terminal metal part.

(1)-1 IP20 Degree of Protection

The terminal of HW-U contact block has IP20 degree of protection. When IP20 is required for wiring, observe the followings.

Make sure to insert the crimping terminal or wire to the terminal straight and fully.

When using a crimping terminal

Use IP20 crimping terminals.

When using a solid wire

Strip the wire insulation 8 to 9 mm from the end and insert the wire to the terminal fully.

When using a stranded wire

Strip the wire insulation 8 to 9 mm from the end and insert the wire to the terminal fully. Make sure that the wires are not loosened.

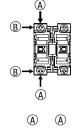
(2) Power Unit 0.3 to 2 mm² (solid wire 0.5 to 1.6 mm)

Illuminated pushbutton/illuminated selector switch

 $\textcircled{\sc B}$ and $\textcircled{\sc B}$ show the wiring direction to the terminals. <Full Voltage Adapter>

Terminal screws M3.5

(spring-up)

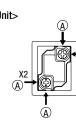


<Transformer Unit> 100/110V AC, 200/220V (240V AC or below) Terminal screws M3.5 (spring-up)



<DC-DC Conver Unit/Transformer Unit>

110V DC. 380V Terminal screws M3.5 (spring-up)



(A)

Applicable Crimping Terminal

Be sure to use an insulation tube or cover on the crimping part of the crimping terminal to prevent electrical shocks.

Crimping terminal for (A)



ø3.6 min



Solid wire



 Strip the wire insulation 7 to 8 mm from the end.

 Insert the wire until the insulation comes into contact with the terminal metal part.

• Terminal cover is integrated in the full voltage adapter and transformer unit. Note that the connection terminal is not IP20.

Miniature
Pilot Lights
TWN

TWN	
TWND	
ARN	
CS	

Control Boxes Emergency Stop Switches

Enabling Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

Power Supplies

LED Illumination

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Flush Silhouette

ø16

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Circuit

Protectors

6 min

4 ma

Crimping terminal for (B)

Operating Instructions

(3) Pilot Light

Switches & Pilot Lights

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Safety Products

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Terminal Blocks

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Power Supplies

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Circuit

Protectors

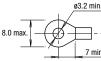
0.3 to 2 mm² (solid wire 0.5 to 1.6 mm)

Applicable crimping terminal

Be sure to use an insulation tube or cover on the crimping part of the crimping terminal to prevent electrical shocks.

APN1, UPQN3B, UPQN4 (6, 12, 24V AC/DC) APEM Terminal screws M3 (self-lifting)

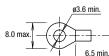
(Arrows show the wiring direction)



7 min

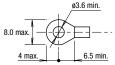


APD1 (6, 12V, 24V AC/DC) Terminal screws M3.5 (self-lifting)





APN1, UPQN3B, UPQN4, APD1 (100 to 480V AC or below, 110V DC) Terminal screws M3.5 (self-lifting)



- Install the terminal cover supplied with the pilot light. The connection terminal is not IP20.
- · When selecting mounting centers and crimping terminals, take sufficient insulation distance into consideration.

Cautions for Wiring

About using DC-DC Converter Unit

1. Note the polarity for wiring when connecting to the DC-DC converter.

Terminal No.	Polarity
X1	Positive
X2	Negative

2. Incandescent lamps cannot be used in DC-DC converter unit.

3. DC-DC converters are equipped with an electric circuit and noise may be heard inside the unit, which does not affect the performance of DC-DC converters.

Recommended Tightening Torque Number of Wires

Unit	Wire		Number of Wires	Recommended Tightening Torque (Nm)	Terminal Screw
	Crimp	oing Terminal	2	1.0 to 1.3	
	Solid	ø0.5 to 1.6 mm (AWG14 to 22)	2	1.0 to 1.3	
HW-U Contact	Wire	ø1.7 to 2.0 mm (AWG12)	1	1.2 to 1.3	M3.5
Block	0.3 to 2.0 mm ² Stranded (AWG14 to 22)		2	1.0 to 1.3	
	Wire	2.1 to 3.5 mm ² (AWG12)	1	1.2 to 1.3	
	Crimp	oing Terminal			
Illuminated	Solid Wire	ø0.5 to 1.6 mm (AWG14 to 22)	2	1.0 to 1.3	M3.5
Unit (*1)	Stranded Wire				
	Crimp	oing Terminal			
Pilot Light	Solid Ø0.5 to 1.6 mm Wire (AWG14 to 22)		2	0.6 to 1.0 (M3.0)	
	Stranded Wire	0.3 to 2.0 mm ² (AWG14 to 22)		1.0 to 1.3 (M3.5)	

*1) Lamp terminal of illuminated pushbuttons and illuminated selector switches



IDEC

Switches & Pil

ø30 Selector Switches / Pushbuttons Part Number Replacement List

	Old Series	3	New Part No. (to)	Demonstr
Model	Operator	Old Part No.	New Part No. (*3)	Remarks
		ASN310	ASN210N	
		ASN311	ASN211N	
		ASN320	ASN220N	
		ASN322	ASN222N	
		ASN37S	ASN22RN-118	
		ASN410	ASN2110N	
		ASN411	ASN2111N	
		ASN420	ASN2120N	
		ASN422	ASN2122N	
	90°	ASN47S	ASN212RN-118	(#0)
	2-position	ASN3010	ASN201N	(*2)
		ASN3011	ASN211N	(*1)
		ASN3020	ASN202N	(*2)
		ASN3022	ASN222N	(*1)
		ASN307S	ASN22RN-118	(*1)
		ASN4010	ASN2210N	
		ASN4011	ASN2211N	
		ASN4020	ASN2220N	
ASN		ASN4022	ASN2222N	
Knob		ASN407S ASN111	ASN222RN-168 ASN320N	(*2)
Operator		ASN111 ASN122	ASN320N ASN340N	(*2)
		ASN122 ASN15S	ASN340N ASN322N	(2)
		ASN155 ASN17S	ASN322N ASN302N	(*1)
		ASN175 ASN18S	ASN302N ASN304N	(*1)
		ASN211	ASN3220N	(*2)
		ASN222	ASN3240N	(*2)
		ASN25S	ASN3222N	(2)
	45° 3-position	ASN27S	ASN3202N	(*1)
		ASN28S	ASN3204N	(*1)
		ASN1011	ASN320N	(*1) (*2)
		ASN1022	ASN340N	(*1) (*2)
		ASN105S	ASN322N	(*1)
		ASN107S	ASN302N	
		ASN108S	ASN304N	
		ASN2011	ASN3120N	(*1) (*2)
		ASN2022	ASN3140N	(*1) (*2)
		ASN205S	ASN3122N	(*1)
		ASN207S	ASN3102N	
		ASN208S	ASN3104N	
		ASN3L10	ASN2L10N	
		ASN3L11	ASN2L11N	
		ASN3L20	ASN2L20N	
		ASN3L22	ASN2L22N	
		ASN3L7S	ASN2L2RN-118	
		ASN4L10	ASN21L10N	
		ASN4L11	ASN21L11N	
		ASN4L20	ASN21L20N	
		ASN4L22	ASN21L22N	
	90°	ASN4L7S	ASN21L2RN-118	
	2-position	ASN30L10	ASN2L01N	(*2)
		ASN30L11	ASN2L11N	(*1)
ASN-L		ASN30L20	ASN2L02N	(*2)
Lever		ASN30L22	ASN2L22N	(*1)
Operator		ASN30L7S	ASN2L2RN-118	(*1)
Spo. ator		ASN40L10	ASN22L10N	ļ
		ASN40L11	ASN22L11N	
		ASN40L20	ASN22L20N	
		ASN40L22	ASN22L22N	
		ASN40L7S	ASN22L2RN-168	
		ASN1L11	ASN3L20N	(*2)
				(*2)
		ASN1L22	ASN3L40N	(=/
		ASN1L5S	ASN3L22N	
	45°	ASN1L5S ASN1L7S	ASN3L22N ASN3L02N	(*1)
	45° 3-position	ASN1L5S ASN1L7S ASN1L8S	ASN3L22N ASN3L02N ASN3L04N	(*1) (*1)
	-	ASN1L5S ASN1L7S ASN1L8S ASN2L11	ASN3L22N ASN3L02N ASN3L04N ASN32L20N	(*1) (*1) (*2)
	-	ASN1L5S ASN1L7S ASN1L8S	ASN3L22N ASN3L02N ASN3L04N	(*1) (*1)

	Old Series	3	New Devi Ne. (*0)	Demender	할
Model	Operator	Old Part No.	New Part No. (*3)	Remarks	Lig
		ASN2L7S	ASN32L02N	(*1)	hts
		ASN2L8S ASN10L11	ASN32L04N ASN3L20N	(*1) (*1) (*2)	
		ASN10L11	ASN3L20N ASN3L40N	(*1) (*2)	
		ASN10L5S	ASN3L22N	(*1)	APEM
ASN-L Lever	45°	ASN10L7S	ASN3L02N		Switches &
Operator	3-position	ASN10L8S	ASN3L04N		Pilot Lights
		ASN20L11	ASN31L20N ASN31L40N	(*1) (*2)	Control Boxes
		ASN20L22 ASN20L5S	ASN31L22N	(*1) (*2) (*1)	Emergency
		ASN20L7S	ASN31L02N	(!)	Stop Switches
		ASN20L8S	ASN31L04N		Enabling Switches
		ASN3K10□	ASN2K10N□-N024401		
			ASN2K11N□-N024401		Safety Products
		ASN3K20	ASN2K20N□-N024401 ASN2K22N□-N024401		Explosion Proof
		ASN3K7S	ASN2K2RN□-118-N024401		
		ASN4K10	ASN21K10N-N024401		Terminal Blocks
		ASN4K11	ASN21K11N-N024401		Relays & Sockets
		ASN4K20	ASN21K20N-N024401		Circuit
	90°	ASN4K22 ASN4K7S	ASN21K22N-N024401 ASN21K2RN-118-N024401		Protectors
	2-position	ASN30K10	ASN2K01N□-N024401	(*2)	Power Supplies
		ASN30K11	ASN2K11N□-N024401	(*1)	LED Illumination
		ASN30K20□	ASN2K02N□-N024401	(*2)	
		ASN30K22	ASN2K22N	(*1)	Controllers
		ASN30K7SD ASN40K10	ASN2K2RN□-118-N024401 ASN22K10N-N024401	(*1)	Operator
		ASN40K11	ASN22K10N-N024401		Interfaces
		ASN40K20	ASN22K20N-N024401		Sensors
ASN-K		ASN40K22	ASN22K22N-N024401		AUTO-ID
Key		ASN40K7S	ASN22K2RN-168-N024401 ASN3K20N□-N024401	(*0)	
Selector		ASN1K11	ASN3K40N□-N024401	(*2) (*2)	
		ASN1K5S	ASN3K22N -N024401	(*1) (*2)	
		ASN1K7S□	ASN3K02N□-N024401	(*1) (*2)	Flush Silhouette
		ASN1K8S	ASN3K04N - N024401	(*1) (*2)	
		ASN2K11	ASN32K20N□-N024401 ASN32K40N□-N024401	(*2) (*2)	ø16
		ASN2K5S	ASN32K40N -N024401	(*1) (*2)	ø22
		ASN2K7S	ASN32K02N□-N024401	(*1) (*2)	-00
	45°	ASN2K8S□	ASN32K04N□-N024401	(*1) (*2)	ø30
	3-position	ASN10K11	ASN3K20N	(*1) (*2)	Miniature
		ASN10K22	ASN3K40N□-N024401 ASN3K22N□-N024401	(*1) (*2) (*1) (*2)	Dilot Lighto
		ASN10K3S	ASN3K02N - N024401	(*2)	Pilot Lights
		ASN10K8S	ASN3K04N - N024401	(*2)	
		ASN20K11	ASN31K20N□-N024401	(*1) (*2)	
		ASN20K22	ASN31K40N□-N024401	(*1) (*2)	TWN
		ASN20K5S	ASN31K22N□-N024401 ASN31K02N□-N024401	(*1) (*2) (*2)	
		ASN20K7S	ASN31K04N	(*2)	TWND
		ASTN3211	ASN211N	(=/	ARN
	90°	ASTN3222	ASN222N	(*1)	
	2-position	ASTN4211	ASN2111N	(44)	CS
		ASTN4222 ASTN1122	ASN2122N ASN322N	(*1)	
		ASTN1122	ASN322N-311		
		ASTN1340	ASN340N		
ASTN		ASTN1422	ASN322N-209		
Knob Operator		ASTN1520	ASN320N	(
oporator	45° 3-position	ASTN1540 ASTN1611	ASN340N ASN311N-303	(*1)	
	o position	ASTN1611 ASTN1622	ASN322N-310		
		ASTN2122	ASN3222N		
		ASTN2222	ASN3222N-311		
		ASTN20122	ASN3122N		
		ASTN20222	ASN3122N-311		
naka sura of	contact one	ration before wir	ing		

 \bullet \Box : Key removable position code. Specify the same code as the old series.

*1) The location of contacts is different. In application for maintenance purpose, make sure of contact operation before wiring.

*2) Contact operation is same as the old series, but contact type is different.
*3) The knob operator is diecast zinc and has new shape. The knob operator can be installed at 45 degrees intervals.

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ø30 Selector Switches / Pushbuttons Part Number Replacement List

9	Old Series			_	
Lig	Model	Operator	Old Part No.	New Part No. (*3)	Remarks
ht			ASTN20422	ASN3122N-209	
S			ASTN20520	ASN3120N	(*1)
	ASTN	45°	ASTN20540	ASN3140N	(*1)
	Knob	45 3-position	ASTN5120	ASN3320N	
APEM	Operator	e peeraon	ASTN5122	ASN3322N	
Switches &			ASTN5222	ASN3322N-311	
Pilot Lights			ASTN5111	ASN3311N-202	
			ASTN32L11	ASN2L11N	(1.1)
Control Boxes		90°	ASTN32L22	ASN2L22N	(*1)
Emergency		2-position	ASTN42L11	ASN21L11N	(1.1)
Stop Switches			ASTN42L22	ASN21L22N	(*1)
Enabling			ASTN11L22	ASN3L22N	
Switches			ASTN12L22	ASN3L22N-311	
Safety Products			ASTN13L40	ASN3L40N	
			ASTN14L22	ASN3L22N-209	(***)
Explosion Proof			ASTN15L20	ASN3L20N	(*1)
Terminal Disake			ASTN15L40	ASN3L40N	(*1)
Terminal Blocks	ASTN∎L		ASTN16L11	ASN3L11N-303	
Relays & Sockets	Lever		ASTN16L22	ASN3L22N-310	
-	Operator	45°	ASTN21L22	ASN32L22N	
Circuit		3-position	ASTN22L22	ASN32L22N-311	
Protectors			ASTN201L22	ASN31L22N	
Power Supplies			ASTN202L22	ASN31L22N-311	
			ASTN204L22	ASN31L22N-209	(*1)
LED Illumination			ASTN205L20	ASN31L20N	(*1) (*1)
Controlloro			ASTN205L40 ASTN51L20	ASN31L40N ASN33L20N	(1)
Controllers			ASTN51L20	ASN33L22N	
Operator			ASTN57L22	ASN33L22N-311	
Interfaces			ASTN52L22	ASN33L11N-202	
Sensors	Sensors AUTO-ID		ASTN32K11	ASN2K11N	
		90°	ASTN32K22	ASN2K22N	(*1)
AUTO-ID		2-position	ASTN42K11	ASN21K11N	
			ASTN42K22	ASN21K22N	(*1)
			ASTN11K22	ASN3K22N	(1)
			ASTN12K22	ASN3K22ND-311	
EL 1 0111 11			ASTN13K40	ASN3K40N	
Flush Silhouette			ASTN14K22	ASN3K22N -209	
ø16			ASTN15K20	ASN3K20N	(*1)
010			ASTN15K40□	ASN3K40N	(*1)
ø22	ASTN∎K		ASTN16K11	ASN3K11ND-303	
-	Key		ASTN16K22	ASN3K22N□-310	
ø30	Selector	1=0	ASTN21K22	ASN32K22N	
		45°	ASTN22K22	ASN32K22N□-311	
Miniature		3-position	ASTN201K22	ASN31K22N	
Dilot Linhte			ASTN202K22	ASN31K22N□-311	
Pilot Lights			ASTN204K22	ASN31K22N□-209	
			ASTN205K20	ASN31K20N	(*1)
			ASTN205K40	ASN31K40N	(*1)
			ASTN51K20	ASN33K20N	
TWN			ASTN51K22	ASN33K22N	
			ASTN52K22	ASN33K22N-311	
TWND			ASTN51K11	ASN33K11N-202	
			ASN120-T	ASN320N	
ARN	ASN-T		ASN140-T	ASN340N	
	Knob	45°	ASN220-T	ASN3220N	
CS	Operator	3-position	ASN240-T	ASN3240N	
	oporator		ASN2020-T	ASN3120N	(*1)
			ASN2040-T	ASN3140N	(*1)
			ASN1L20-T	ASN3L20N	
	ASN-T		ASN1L40-T	ASN3L40N	
	ASN-T Lever	45° 3-position	ASN2L20-T	ASN32L20N	
	Operator		ASN2L40-T	ASN32L40N	
	oporator		ASN20L20-T	ASN31L20N	(*1)
			ASN20L40-T	ASN31L40N	(*1)

Model	Old Seri Operator	old Part No.	New Part No. (*3)	Remarks
model	operator	ASN3K10□-T	ASN2K10N	
ASN■K-T Key Selector		ASN3K11□-T	ASN2K11N	
	90° 2-position	ASN3K20□-T	ASN2K20N	
		ASN3K22□-T	ASN2K22N	
		ASN3K7S□-T	ASN2K2RN□-118	
		ASN4K10-T	ASN21K10N	
		ASN4K11-T	ASN21K11N	
		ASN4K20-T	ASN21K20N	
		ASN4K22-T	ASN21K22N	
		ASN4K7S-T	ASN21K2RN-118	
		ASN40K10-T	ASN22K10N	
		ASN40K11-T	ASN22K11N	
		ASN40K20-T	ASN22K20N	
		ASN40K22-T ASN40K7S-T	ASN22K22N ASN22K2RN-168	
		ASN1K20□-T	ASN3K20N	
		ASN1K20⊡-T	ASN3K40N	
		ASN1K40⊡-T	ASN3K22N	
		ASN1K7S□-T	ASN3K02N	(*1)
		ASN1K8S□-T	ASN3K04N	(*1)
		ASN2K20□-T	ASN32K20N	
		ASN2K40□-T	ASN32K40N	
	45° 3-position	ASN2K5S□-T	ASN32K22N	
		ASN2K7S□-T	ASN32K02N	(*1)
		ASN2K8S -T	ASN32K04N	(*1)
		ASN20K20□-T	ASN31K20N	(*1)
		ASN20K40□-T	ASN31K40N	(*1)
		ASN20K5SD-T	ASN31K22N	(*1)
		ASN20K7SD-T	ASN31K02N	
		ASN20K8SD-T	ASN31K04N	
	90° - 2-position	ABN6111	ASBN211N-A03	
		ABN6411	ASBN211N-K04	(*2)
		ABN9111	N/A	
		ABN7120	ASBN220N-D01	
Selector		ABN6122	ASBN222N-A08	(*1)
Pushbuttons		ABN6222	ASBN222N-C10	(*1)
Ring		ABN6422	ASBN222N-K15	(*2)
Operator		ABN7122	ASBN222N-D10	(*1)
·		ABN7222	ASBN222N-E10	(*1)
		ABN7322	ASBN222N-F10	(*1)
		ABN9122	N/A	
		ABN6L111	ASBN211N-A03	(*4)
		ABN6L411	ASBN211N-K04	(*2) (*4)
		ABN9L111	N/A	
Selector		ABN6L122	ASBN222N-A08	(*1) (*4)
Pushbuttons		ABN6L222	ASBN222N-C10	(*1) (*4)
Lever		ABN6L422	ASBN222N-K15	(*2) (*4)
Operator		ABN7L122	ASBN222N-D10	(*1) (*4)
		ABN7L222	ASBN222N-E10	(*1) (*4)
		ABN7L322	ASBN222N-F10	(*1) (*4)
		ABN9L122	N/A	
	Pin Lock ON Lock Type Pin Lock Mushroom Pull	ABN8P10	ABD8P10N	(*5)
		ABN8P01	ABD8P01N	(*5)
		ABN8P11	ABD8P11N	(*5)
		ABN8P20	ABD8P20N	(*5)
		ABN8P02	ABD8P02N	(*5)
		ABN8P22	ABD8P22N	(*5)
		ABN8P10-TK231-1		(*5)
Pushbuttons		ABN8P01-TK231-1	ABD8PN01N	(*5)
		ABN8P11-TK231-1	ABD8PN11N	(*5)
		ABN8P20-TK231-1	ABD8PN20N	(*5)
		ABN8P02-TK231-1	ABD8PN02N	(*5)
		ABN8P22-TK231-1	ABD8PN22N	(*5)
		ATN2310	AZN310N	
		ATN2311	AZN311N	
		ATN2320	AZN320N	
		ATN2302□	AZN302N	1

• Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow).

⇒ Decing a control code in place of * in rai rate. Do block, a (green), a (red), if (r

SAPEN01A_B TWN August 2023

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45 degrees intervals.*4) The new knob operator of selector pushbuttons is ring operator. The old series is lever operator.

*5) Button material New series: plastic / Old series: metal

Ordering Terms and Conditions

Thank you for using IDEC Products.

By purchasing products listed in our catalogs, datasheets, and the like (hereinafter referred to as "Catalogs") you agree to be bound by these terms and conditions. Please read and agree to the terms and conditions before placing your order.

1. Notes on contents of Catalogs

(1) Rated values, performance values, and specification values of IDEC products listed in this Catalog are values acquired under respective conditions in independent testing, and do not guarantee values gained in combined conditions.

Also, durability varies depending on the usage environment and usage conditions.

- (2) Reference data and reference values listed in Catalogs are for reference purposes only, and do not guarantee that the product will always operate appropriately in that range.
- (3) The specifications / appearance and accessories of IDEC products listed in Catalogs are subject to change or termination of sales without notice, for improvement or other reasons.
- (4) The content of Catalogs is subject to change without notice.

2. Note on applications

- (1) If using IDEC products in combination with other products, confirm the applicable laws / regulations and standards. Also, confirm that IDEC products are compatible with your systems, machines, devices, and the like by using under the actual conditions. IDEC shall bear no liability whatsoever regarding the compatibility with IDEC products.
- (2) The usage examples and application examples listed in Catalogs are for reference purposes only. Therefore, when introducing a product, confirm the performance and safety of the instruments, devices, and the like before use. Furthermore, regarding these examples, IDEC does not grant license to use IDEC products to you, and IDEC offers no warranties regarding the ownership of intellectual property rights or non-infringement upon the intellectual property rights of third parties.
- (3) When using IDEC products, be cautious when implementing the following.
 i. Use of IDEC products with sufficient allowance for rating and performance
 - ii. Safety design, including redundant design and malfunction prevention design that prevents other danger and damage even in the event that an IDEC product fails
 - iii. Wiring and installation that ensures the IDEC product used in your system, machine, device, or the like can perform and function according to its specifications
- (4) Continuing to use an IDEC product even after the performance has deteriorated can result in abnormal heat, smoke, fires, and the like due to insulation deterioration or the like. Perform periodic maintenance for IDEC products and the systems, machines, devices, and the like in which they are used.
- (5) IDEC products are developed and manufactured as general-purpose products for general industrial products. They are not intended for use in the following applications, and in the event that you use an IDEC product for these applications, unless otherwise agreed upon between you and IDEC, IDEC shall provide no guarantees whatsoever regarding IDEC products.
 - i. Use in applications that require a high degree of safety, including nuclear power control equipment, transportation equipment (railroads / airplanes / ships / vehicles / vehicle instruments, etc.), equipment for use in outer space, elevating equipment, medical instruments, safety devices, or any other equipment, instruments, or the like that could endanger life or human health
 - ii. Use in applications that require a high degree of reliability, such as provision systems for gas / waterworks / electricity, etc., systems that operate continuously for 24 hours, and settlement systems
 - iii. Use in applications where the product may be handled or used deviating from the specifications or conditions / environment listed in the Catalogs, such as equipment used outdoors or applications in environments subject to chemical pollution or electromagnetic interference If you would like to use IDEC products in the above applications, be sure to consult with an IDEC sales representative.

3. Inspections

We ask that you implement inspections for IDEC products you purchase without delay, as well as thoroughly keep in mind management/maintenance regarding handling of the product before and during the inspection.

4. Warranty

(1) Warranty period

The warranty period for IDEC products shall be one (1) year after purchase or delivery to the specified location. However, this shall not apply in cases where there is a different specification in the Catalogs or there is another agreement in place between you and IDEC.

(2) Warranty scope

Should a failure occur in an IDEC product during the above warranty period for reasons attributable to IDEC, then IDEC shall replace or repair that product, free of charge, at the purchase location / delivery location of the product, or an IDEC service base. However, failures caused by the following reasons shall be deemed outside the scope of this warranty.

- i. The product was handled or used deviating from the conditions / environment listed in the Catalogs
- ii. The failure was caused by reasons other than an IDEC product
- iii. Modification or repair was performed by a party other than IDEC
- iv. The failure was caused by a software program of a party other than $\ensuremath{\mathsf{IDEC}}$
- v. The product was used outside of its original purpose
- vi. Replacement of maintenance parts, installation of accessories, or the like was not performed properly in accordance with the user's manual and Catalogs

vii. The failure could not have been predicted with the scientific and technical standards at the time when the product was shipped from $\ensuremath{\mathsf{IDEC}}$

viii. The failure was due to other causes not attributable to IDEC (including cases of force majeure such as natural disasters and other disasters)

Furthermore, the warranty described here refers to a warranty on the IDEC product as a unit, and damages induced by the failure of an IDEC product are excluded from this warranty.

5. Limitation of liability

The warranty listed in this Agreement is the full and complete warranty for IDEC products, and IDEC shall bear no liability whatsoever regarding special damages, indirect damages, incidental damages, or passive damages that occurred due to an IDEC product.

6. Service scope

The prices of IDEC products do not include the cost of services, such as dispatching technicians. Therefore, separate fees are required in the following cases.

- Instructions for installation / adjustment and accompaniment at test operation (including creating application software and testing operation, etc.)
- (2) Maintenance inspections, adjustments, and repairs
- (3) Technical instructions and technical training
- (4) Product tests or inspections specified by you

The above content assumes transactions and usage within your region. Please consult with an IDEC sales representative regarding transactions and usage outside of your region. Also, IDEC provides no guarantees whatsoever regarding IDEC products sold outside your region.

IDEC CORPORATION

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