

■ CCC approved

● AR22/DR22 and AD30/DR30 series

Pushbutton switches

Bezel	Operator	Type			
		AR22		AR30	
		Momentary action	Alternate action (Turn-reset for V5R)	Momentary action	Alternate action (Turn-reset for V5R)
Round bezel	Flush round head	AR22F0R	AR22F5R	AR30F0R	AR30F5R
	Extended round head	AR22E0R	AR22E5R	AR30E0R	AR30E5R
	Flush round head (symbol mark type)	AR22FAR	AR22FBR	AR30FAR	AR30FBR
	Extended round head (symbol mark type)	AR22EAR	AR22EBR	AR30EAR	AR30EBR
	Extended with half guard	AR22G0R	AR22G5R	AR30G0R	AR30G5R
	Extended with full guard (24mm dia.)	AR22G3R	AR22G8R	AR30G1R	AR30G6R
	Flush with full guard (24mm dia.)	AR22G2R	–	–	–
	Mushroom head with full guard (40mm dia.)	AR22M3R	–	AR30M3R	AR30M8R
	Mushroom head with full guard (35mm dia. metal nut)	–	–	AR30GSR	–
	Mushroom head (29mm dia.)	AR22M4R	AR22M9R	AR30M4R	–
	Mushroom head (40mm dia.)	AR22M0R	AR22M5R	AR30M0R	AR30M5R
	Giant head	–	–	AR30B0R	–
	Giant head with guard	–	–	AR30B1R	–
	Giant head with full guard	–	–	AR30B2R	–
	Giant head with full guard	–	–	AR30B3R	–
Push-lock, turn-reset (40mm dia, with white arrow)	–	AR22V5R	–	AR30V5R	
Square bezel	Flush square head	AR22F0S	AR22F5S	–	–
	Extended square head	AR22E0S	AR22E5S	–	–
	Flush round head	AR22F0Y	AR22F5Y	–	–
	Extended round head	AR22E0Y	AR22E5Y	–	–
	Mushroom head	AR22M4Y	–	–	–
Certificate No.		2003010305063372		2003010305063384	

Note: Certified contact of AR22 type: Momentary action: within 6 contacts
Alternate action : within 4 contacts
Certified contact of AR30 type: Momentary action: within 8 contacts
Alternate action : within 4 contacts

Ring selection type pushbutton switches

Bezel	Operator	Type	
		AR22	AR30
Round bezel	With selector ring	AR22S1R	AR30S1R
		AR22S2R	AR30S2R
		AR22S3R	AR30S3R
		AR22S6R	AR30S6R
Certificate No.		2003010305063372	2003010305063384

Note: Certified contact: 2NO+2NC (S2R: 2NO is also certified)

Emergency stop pushbutton switches

Bezel	Operator	Type			
		AR22		AR30	
		With white arrow (soft-touch)	No white arrow	With white arrow (soft-touch)	No white arrow
Round bezel	Push-lock, turn-reset (29mm dia.)	AR22VSR	AR22V4R	–	–
	Push-lock, turn-reset (40mm dia.)	AR22V0R	AR22V2R	AR30V0R	AR30V2R
	Push-lock, turn-reset (65mm dia.)	–	–	AR30V1R	–
	Key-release push-lock, turn-reset (40mm dia.)	–	AR22V7R	–	–
	Push-lock, pull-reset (35mm dia.)	–	AR22Q2R	–	AR30Q2R
	Unibody push-lock, turn-reset (40mm dia.)	AR22VGE	–	–	–
Certificate No.		2003010305063372 (except for AR22VGE) 2005010305156646 (for AR22VGE)		2003010305063384	

Notes: • Certified contact: 1NC, 1NO+1NC, 2NC, 3NC, 2NO+2NC, 4NC (except for Q2R, VGE type)
• Certified contact of Q2R, VGE type: 1NC, 1NO+1NC and 2NC only
• Certified button color: red (R) only

Illuminated pushbutton switches

Bezel	Operator	Type			
		AR22		AR30	
		Momentary	Alternate	Momentary	Alternate
Round bezel	Flush round head	AR22F0L	AR22F5L	–	–
	Extended round head	AR22E0L	AR22E5L	AR30E0L	AR30E5L
	Mushroom head (29mm dia.)	AR22M4L	AR22M9L	–	–
	Mushroom head (40mm dia.)	AR22M0L	AR22M5L	–	–
	Extended with transparent full guard (24mm dia.)	AR22G4L	AR22G9L	AR30G4L	AR30G9L
	Extended with full guard (24mm dia. with openings)	AR22G2L	AR22G7L	AR30G2L	AR30G7L
	Extended with full guard (24mm dia.)	AR22G1L	AR22G6L	AR30G3L	AR30G8L
	Push-lock, turn-reset (40mm dia. with white arrow)	–	–	–	AR30V5L
Square bezel	Flush square head	AR22F0M	AR22F5M	–	–
	Extended square head	AR22E0M	AR22E5M	–	–
	Flush round head	AR22F0P	AR22F5P	–	–
	Extended round head	AR22E0P	AR22E5P	–	–
	Mushroom head	AR22M4P	–	–	–
Certificate No.	2003010305063372		2003010305063384		
Specifications	<ul style="list-style-type: none"> · Contact <li style="padding-left: 20px;">Without transformer <li style="padding-left: 40px;">Momentary action: within 5 contacts <li style="padding-left: 40px;">Alternate action: within 3 contacts <li style="padding-left: 20px;">With transformer <li style="padding-left: 40px;">Momentary action: within 3 contacts <li style="padding-left: 40px;">Alternate action: within 2 contacts 		<ul style="list-style-type: none"> · Contact <li style="padding-left: 20px;">Without transformer <li style="padding-left: 40px;">Momentary action: within 6 contacts <li style="padding-left: 40px;">Alternate action: within 3 contacts <li style="padding-left: 20px;">With transformer <li style="padding-left: 40px;">Momentary action: within 4 contacts <li style="padding-left: 40px;">Alternate action: within 2 contacts 		
<ul style="list-style-type: none"> · Color of button <li style="padding-left: 20px;">Green, red, white, yellow, orange, blue · Light source <li style="padding-left: 20px;">LED lamp, incandescent lamp · Operating voltage of lamp <li style="padding-left: 20px;">Without transformer <li style="padding-left: 40px;">LED: 6V AC, 6V DC, 12V AC/DC <li style="padding-left: 40px;">Incandescent lamp: 5.5V AC/DC, 20V AC/DC <li style="padding-left: 40px;">LED, incandescent lamp: 15V AC/DC, 24V AC/DC <li style="padding-left: 20px;">With transformer <li style="padding-left: 40px;">LED, incandescent lamp: 100-110V AC, 115-127V AC, 200-220V AC, 230-254V AC, 350-380V AC, 400-440V AC, 480V AC, 500-550V AC 					

Emergency stop illuminated pushbutton switches

Bezel	Operator	Type			
		AR22		AR30	
		With white arrow (soft-touch)	No white arrow	With white arrow (soft-touch)	No white arrow
Round bezel	Push-lock, turn-reset (29mm dia.)	AR22VSL	–	–	–
	Push-lock, turn-reset (40mm dia.)	AR22V0L	AR22V2L	AR30V0L	AR30V2L
	Push-lock, turn-reset (40mm dia. transparent in all colors)	AR22VDL	AR22VAL	–	–
	Unibody push-lock, turn-reset (40mm dia.)	AR22VGF	–	–	–
Certificate No.	2003010305063372 (except for AR22VGF)		2003010305063384		
	2005010305156646 (for AR22VGF)				

- Notes:
- Certified contact without transformer: 1NC, 1NO+1NC, 2NC, 3NC (except for VGF type)
 - Certified contact with transformer: 1NC, 1NO+1NC, 2NC (except for VGF type)
 - Certified contact of VGF type: 1NC, 1NO+1NC and 2NC only,
 - Certified lamp voltage of VGF type: LED lamp: 24V AC/DC, neon lamp: 110, 120, 220, 240V AC
 - Certified button color: red (R) only

Selector switches

Bezel	Operator	Type			
		AR22		AR30	
		Standard type	Control type	Standard type	Control type
Round bezel	Knob	AR22PR	AR22PCR	AR30PR	AR30PCR
	Lever	AR22WR	AR22WCR	AR30WR	AR30WCR
	Cylindrical knob	AR22RR	AR22RCR	–	–
	Key	AR22JR	AR22JCR	AR30JR	AR30JCR
	Key (long durability)	AR22JAR	–	AR30JAR	–
Square bezel	Knob	AR22PY	AR22PCY	–	–
	Lever	AR22WY	AR22WCY	–	–
	Cylindrical knob	AR22RY	AR22RCY	–	–
	Key	AR22JY	AR22JCY	–	–
Certificate No.		2003010305063372		2003010305063384	

Note: Certified contact of AR22 type: Maintained: within 6 contacts
Control type, spring return and spring / manual return: within 4 contacts
Certified contact of AR30 type: Momentary action: within 8 contacts
Control type, spring return and spring / manual return: within 4 contacts

Illuminated selector switches

Bezel	Operator	Type	
		AR22	AR30
		Standard type	Standard type
Round bezel	Knob	AR22PL	AR30PL
Square bezel	Knob	AR22PP	–
Certificate No.		2003010305063372	2003010305063384

Notes: • Certified contact of AR22 type :
Without transformer
Maintained : within 4 contacts
Spring return and spring / manual return: within 3 contacts
With transformer
Maintained : within 3 contacts
Spring return and spring / manual return: within 2 contacts

• Certified contact of AR30 type :
Without transformer
Maintained : within 6 contacts
Spring return and spring / manual return: within 3 contacts
With transformer
Maintained : within 4 contacts
Spring return and spring / manual return: within 2 contacts

Pilot lights

Bezel	Lens	Type	
		DR22	DR30
Round bezel	Dome	DR22D0L	DR30D0L
	Extended round	DR22E3L	DR30E3L
	Faceted	DR22K0L	DR30K0L
Square bezel	Flush square	DR22F3M	–
	Flush square (Transparent lens)	DR22F4M	DR30F4M
	Flush square (12mm high frame)	DR22F5M	–
	Extended square	DR22E3M	–
	Flush rectangular	DR22E3N	–
	Flush rectangular (Transparent lens)	–	DR30F4N
	Flush square large type (Transparent lens)	–	DR30M4M
	Extended round	DR22E3P	–
Certificate No.		2003010305063383	2003010305063487

Notes: • Certified lamp: both LED and incandescent lamp
• Certified transformer type: standard and short-body
• Except for with resistor/resistor unit

Item with degree of protection IP2X (IP20)

Type	Certificate No.
AR22 □ZB	2003010305063372
AR30 □ZB	2003010305063384
DR22 □ZB	2003010305063383
DR30 □ZB	2003010305063487

Notes: • Certified for all types listed on the table in page 04/289 to 04/291 except for unibody push-lock, turn-reset (40mm dia.) types of emergency stop illuminated pushbutton switches and short-body transformer of pilot light.
• The terminal section of standard emergency stop illuminated pushbutton switches has degree of protection, IP2X.

● AH164, 165, 165-2 series

Pushbutton switches

Operator	Type					
	AH164		AH165		AH165-2	
	Momentary action	Alternate action	Momentary action	Alternate action (Turn-reset for V, V1)	Momentary action	Alternate action (Turn-reset for 2V, 2YV)
Flush round head	–	–	–	–	AH165-2F	AH165-2F5
Extended round head	AH164-E	AH164-E5	AH165-E	AH165-E5	AH165-2E	AH165-2E5
Extended square head	–	–	–	–	AH165-2SE	AH165-2SE5
Extended square concave head	–	–	–	–	AH165-2SCE	AH165-2SCE5
Flush square head	AH164-SF	AH164-SF5	AH165-SF	AH165-SF5	AH165-2SF	AH165-2SF5
Flush rectangular head	AH164-TF	AH164-TF5	AH165-TF	AH165-TF5	–	–
Flush square head with guard	AH164-SGF	AH164-SGF5	AH165-SGF	AH165-SGF5	–	–
Flush rectangular head with guard	AH164-TGF	AH164-TGF5	AH165-TGF	AH165-TGF5	–	–
Mushroom head (round bezel)	–	–	–	–	AH165-2M	–
Mushroom head (square bezel)	–	–	–	–	AH165-2YM	–
Mushroom head	AH164-M	AH164-M5	AH165-M	AH165-M5	–	–
Convex square head	AH164-SM	AH164-SM5	AH165-SM	AH165-SM5	–	–
Convex rectangular head	AH164-TM	AH164-TM5	AH165-TM	AH165-TM5	–	–
Push-locked (round bezel)	–	–	–	AH165-V	–	AH165-2V
Push-locked large type	–	–	–	AH165-V1	–	–
Push-locked (square bezel)	–	–	–	–	–	AH165-2YV
Certificate No.	2003010305071068					

- Notes:
- Certified contact: 1NO+1NC, 2NO+2NC, 3NO+3NC. AH165-V and -V1: 1NC and 2NC only.
 - Certified button color: all in manufactured range of corresponding type. AH165-V and -V1: red (R) only.
 - Certified terminal shape: for soldering and tab, and for wrapping. AH165-V and -V1: soldering and tab only.

Ring selection type pushbutton switches

Operator	Type
	AH165-2
With selector ring (round bezel)	AH165-2S2
With selector ring (square bezel)	AH165-2YS2
Certificate No.	2003010305071068

Note: Certified contact: 2NO+2NC

Emergency stop pushbutton switches

Operator	Type
	AH165
Push-lock, turn-reset (ø32)	AH165-V5
Push-lock, turn-reset (ø40)	AH165-V6
Certificate No.	2003010305071068

- Notes:
- Certified contact: 1NC and 2NC only
 - Certified button color: red (R) only
 - Certified terminal shape: soldering and tab only

Illuminated pushbutton switches

Operator	Type					
	AH164		AH165		AH165-2	
	Momentary action	Alternate action	Momentary action	Alternate action	Momentary action	Alternate action (Turn-reset for 2VL, 2YVL)
Flush round head	–	–	–	–	AH165-2FL	AH165-2FL5
Extended round head	AH164-L	AH164-L5	AH165-L	AH165-L5	AH165-2EL	AH165-2EL5
Extended square head	–	–	–	–	AH165-2SEL	AH165-2SEL5
Concave square head	–	–	–	–	AH165-2SCL	AH165-2SCL5
Flush square head	AH164-SL	AH164-SL5	AH165-SL	AH165-SL5	AH165-2SFL	AH165-2SFL5
Flush rectangular head	AH164-TL	AH164-TL5	AH165-TL	AH165-TL5	–	–
Flush square head with guard	AH164-SGL	AH164-SGL5	AH165-SGL	AH165-SGL5	–	–
Flush rectangular head with guard	AH164-TGL	AH164-TGL5	AH165-TGL	AH165-TGL5	–	–
Mushroom head (round bezel)	–	–	–	–	AH165-2ML	–
Mushroom head (square bezel)	–	–	–	–	AH165-2YML	–
Push-locked (round bezel)	–	–	–	–	–	AH165-2VL
Push-locked (square bezel)	–	–	–	–	–	AH165-2YVL
Certificate No.	2003010305071068					

Notes: • Certified contact: 1NO+1NC, 2NO+2NC, 3NO+3NC
 • Certified terminal shape: for soldering and tab, and for wrapping.
 • Certified lamp: LED, incandescent lamp and neon

• Certified operating lamp voltage: 6, 12 and 24V DC (LED)/ 5, 12, 15 and 24V AC/DC (incandescent lamp) / 110, 120, 220 and 240V AC (neon) /110, 220V AC (LED and incandescent lamps with transformer)
 • The spot LED type have not been approved.

Selector switches (Standard)

Operator	Type		
	AH164	AH165	AH165-2
Knob (round bezel)	–	–	AH165-2P
Knob (rectangular bezel)	AH164-P	AH165-P	–
Knob (square bezel)	AH164-SP	AH165-SP	AH165-2YP
Key (round bezel)	–	–	AH165-2J
Key (rectangular bezel)	AH164-J	AH165-J	–
Key (square bezel)	AH164-SJ	AH165-SJ	AH165-2YJ
Key, 45-degree notch (rectangular bezel)	AH164-JK	AH165-JK	–
Certificate No.	2003010305071068		

Notes: • Certified contact: 1NO+1NC, 2NO+2NC, 3NO+3NC
 • Certified terminal shape: for soldering and tab, and for wrapping

Selector switches (Direct opening action)

Operator	Type
Key (rectangular bezel)	AH165-JM2
Key (round bezel)	AH165-RJM2
Certificate No.	2003010305071068

Notes: • Certified contact: 1NO+1NC, 2NO+2NC
 • Certified position quantity: 2-position only.
 Certified returning method: maintained only.

Illuminated selector switches

Operator	Type
knob (round bezel)	AH165-2PL
Certificate No.	2003010305071068

Notes: • Certified contact: 1NO+1NC, 2NO+2NC
 • Certified operating lamp voltage: 6, 12 and 24V DC (LED)/ 5, 12, 15 and 24V AC/DC (incandescent lamp)

Pilot lights

Lens	Type		
	AH164	AH165	AH165-2
Flush round	–	–	AH165-2Z
Extended round	AH164-Z	AH165-Z	AH165-2ZE
Extended square	–	–	AH165-2SZE
Flush square	AH164-ZS	AH165-ZS	AH165-2SZ
Flush rectangular	AH164-ZT	AH165-ZT	–
Certificate No.	2003010305071044		

Notes: • Certified lamp: LED, incandescent lamp and neon
 • Certified operating lamp voltage: 6, 12 and 24V DC (LED)/ 5, 12, 15 and 24V AC/DC (incandescent lamp)/ 110, 120, 220 and 240V AC (neon) /110, 220V AC (LED and incandescent lamps with transformer)
 • The spot LED type have not been approved.