

Pushbuttons/Selectors/Pilot Lights/Buzzers

AR22 and DR22











Quick reference guide

■ Pushbutton switches

Operator	Type	Operator	Type	Operator	Type
Extended with full guard (24mm dia.) <i>See page 04/20, 04/41</i> 	AR22G3R, G8R  AF94-292	Pushbutton with selector ring (2-position) <i>See page 04/22, 04/41</i> 	AR22S1R, S2R, S3R, S6R  AF97-507	Flush round head with square bezel <i>See page 04/20, 04/41</i> 	AR22F0Y, F5Y  AF94-295
Flush with full guard (24mm dia.) <i>See page 04/20, 04/41</i> 	AR22G2R, G7R  AF02-68	Push-lock, turn-reset (40mm dia. with white arrow) <i>See page 04/20, 04/41</i> 	AR22V5R  KKD08-042	Extended round head with square bezel <i>See page 04/21, 04/41</i> 	AR22E0Y, E5Y  AF94-297
Extended with half guard <i>See page 04/20, 04/41</i> 	AR22G0R, G5R  AF96-236	Flush square head <i>See page 04/20, 04/41</i> 	AR22F0S, F5S  AF94-316	Mushroom head with square bezel (29mm dia.) <i>See page 04/21, 04/41</i> 	AR22M4Y  AF94-298
Mushroom head with full guard (40mm dia.) <i>See page 04/20, 04/41</i> 	AR22M3R, M8R  AF94-372	Extended square head <i>See page 04/20, 04/41</i> 	AR22E0S, E5S  AF94-296		

Note: AR22M8R: Not approved standard

■ Emergency stop pushbutton switches (conform to EN418)

Operator	Type	Operator	Type	Operator	Type
Push-lock, turn-reset (Soft-touch 40mm dia. with white arrow) <i>See page 04/23, 04/42</i> 	AR22V0R  KKD08-042	Push-lock, turn-reset (29mm dia.) <i>See page 04/23, 04/42</i> 	AR22V4R  KKD06-339	Unibody push-lock, turn-reset (Soft-touch 40mm dia. with white arrow) <i>See page 04/23, 04/42</i> 	AR22VGE  KKD05-023b
Push-lock, turn-reset (40mm dia.) <i>See page 04/23, 04/42</i> 	AR22V2R  KKD05-020b	Key release push-lock, turn-reset (40mm dia.) <i>See page 04/23, 04/42</i> 	AR22V7R  KKD09-020	Push-lock, turn-reset (40mm dia. with "EMO" character) <i>See page 04/120</i> 	AR22V3R-■RZ286  KKD05-261
Push-lock, turn-reset (Soft-touch 29mm dia. with white arrow) <i>See page 04/23, 04/42</i> 	AR22VSR  KKD06-346	Push-lock, pull-reset (35mm dia.) <i>See page 04/23, 04/42</i> 	AR22Q2R  KKD06-334		



Notes: Provided with the  (Direct opening action)  : See page 04/289

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Type number nomenclature

Pushbuttons

AR22 E0R – 10 R  

① ② ③ ④ ⑤ ⑥

① Product category

AR22: 22mm-dia. pushbutton
22mm-dia. emergency stop pushbutton

② Operator

- Pushbutton switch
- F0R: Flush round head
- F5R: Flush round head (Alternate)
- E0R: Extended round head
- E5R: Extended round head (Alternate)
- FAR: Flush round head (Symbol mark type)
- FBR: Flush round head (Symbol mark type, alternate)
- EAR: Extended round head (Symbol mark type)
- EBR: Extended round head (Symbol mark type, alternate)
- M0R: Mushroom head (40mm dia.)
- M5R: Mushroom head (40mm dia. Alternate)
- M4R: Mushroom head (29mm dia.)
- M9R: Mushroom head (29mm dia. Alternate)
- G3R: Extended with full guard (24mm dia.)
- G8R: Extended with full guard (24mm dia. Alternate)
- G2R: Flush with full guard (24mm dia.)
- G7R: Flush with full guard (24mm dia. Alternate)
- G0R: Extended with half guard
- G5R: Extended with half guard (Alternate)
- M3R: Mushroom head with full guard (40mm dia.)
- M8R: Mushroom head with full guard (40mm dia. Alternate)
- S1R: Push-button with selector ring (2-position)
- S2R: Push-button with selector ring (2-position)
- S3R: Push-button with selector ring (2-position)
- S6R: Push-button with selector ring (2-position)
- V5R: Push-lock, turn-reset (40mm dia. with white arrow) *1
- F0S: Flush square head
- F5S: Flush square head (Alternate)
- E0S: Extended square head
- E5S: Extended square head (Alternate)
- F0Y: Flush round head with square bezel
- F5Y: Flush round head with square bezel (Alternate)
- E0Y: Extended round head with square bezel
- E5Y: Extended round head with square bezel (Alternate)
- M4Y: Mushroom head with square bezel (29mm dia.)
 - Emergency stop pushbutton switch
- V0R: Push-lock, turn-reset (Soft-touch 40mm dia. with white arrow)
- V2R: Push-lock, turn-reset (40mm dia.)
- VSR: Push-lock, turn-reset (Soft-touch 29mm dia. with white arrow)
- V4R: Push-lock, turn-reset (29mm dia.)
- V7R: Key-release push-lock, turn-reset (40mm dia.)
- Q2R: Push-lock, pull-reset (35mm dia.)
- VGE: Unibody push-lock, turn-reset (Soft-touch 40mm dia. with white arrow)

③ Contact arrangement

10: 1NO	30: 3NO
01: 1NC	03: 3NC
11: 1NO+1NC	33: 3NO+3NC
20: 2NO	40: 4NO
02: 2NC	04: 4NC
22: 2NO+2NC	50: 5NO
	05: 5NC

④ Color of button

G: Green	Y: Yellow
R: Red ²	A: Orange
B: Black	S: Blue
W: White	C: Clear
T: Green, Red, Black (For AR22F0R)	(For AR22FAR, FBR, EAR, EBR)

⑤ Symbol mark (For AR22FAR, FBR, EAR, EBR)

Symbol mark	○	I	⊕	○	I	⊕	
Color of button	White	Black	White	Black	White	Black	Clear
Color of mark	Red		Green		Green		Black
Code	01	02	03	04	11	12	02B 04B 12B

⑥ Special product

Z9: Resisting water-soluble cutting oils and heat
Z8: With a contact protection cover
Z4: Resisting sulfuration gas
ZB: Meeting IP2X finger-protection standards

Notes: *1 Products with no trigger action mechanism. These products cannot be used as emergency stop switches that comply with EN standards.

*2 Button color of emergency stop switches are Red only.

• The manufacturing range varies depending on the model. For details, refer to the contents of this catalog.

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Ratings and specifications

■ **Contact ratings**
 ● **UL/CSA standards**
AC (COS ϕ =0.35)

Contact rated code	120V		240V		480V		600V	
	Making current	Breaking current	Making current	Breaking current	Making current	Breaking current	Making current	Breaking current
A600	60A	6.0A	30A	3.0A	15A	1.5A	12A	1.2A
B300 (AR22VG)	30A	3.0A	15A	1.5A	–	–	–	–

DC $T_{0.95}$ = 6P (Max. 300ms)

Description	Contact rated code	Making current · Breaking current		
		125V	250V	301V–600V
Illuminated pushbutton switch Pushbutton (Ring type selector switch: AR22S2R only) Emergency stop pushbutton switch	P600	1.1A	0.55A	0.2A
Emergency stop illuminated pushbutton switch (Except the overlap contact types)	Q300 (AR22VG)	0.55A	0.27A	–
Overlap contact types of products shown above Pushbutton (Ring type selector switch: AR22S1R, S6R only) Selector switch (2-position only, except the overlap contact types) Illuminated selector switch (2-position only, except the overlap contact types)	Q600	0.55A	0.27A	0.1A
Pushbutton (Ring type selector switch: AR22S3R only) Selector switch (2-pos./overlap contact type, 3-, 4-, 5-pos. type) Illuminated selector switch (2-pos./overlap contact type, 3-pos. type)	R300	0.22A	0.11A	–

Note: Joy stick selector switches (Lever switches): 250V AC, 5A (Res. load) 125V DC, 0.2A 24V DC, 1A (Res. load)

● **EN standard/TÜV approved**




Description	Rated operational current			
	Rated thermal current	Rated operational voltage	AC15 (Ind. load)	DC13 (Ind. load)
			Rated operational current	Rated operational current
Illuminated pushbutton switch Pushbutton (Except the selector ring type) Emergency stop pushbutton switch Emergency stop illuminated pushbutton switch Selector switch (2-position) Illuminated selector switch (2-position)	10A	24V	6.0A	4.0A (AR22VG: 1.5A)
		120V	6.0A (AR22VG: 3A)	–
		125V	–	1.3A (AR22VG: 0.3A)
		240V	6.0A (AR22VG: 3A)	–
		250V	–	0.45A (AR22VG: 0.15A)
		480V	2.5A (AR22VG: –)	–
		600V	2.0A (AR22VG: –)	–
Selector switch (3, 4, 5-position) Illuminated selector switch (3-position) Pushbutton with selector ring	10A	24V	6.0A	2.0A
		120V	6.0A	–
		125V	–	0.65A
		240V	6.0A	–
		250V	–	0.23A
		480V	2.5A	–
		600V	2.0A	–
Joy stick selector switch (Lever switch)	5A	24V	–	0.7A
		120V	0.3A	–
		125V	–	0.15A
		240V	0.3A	–

Lamp rated voltage UL/CSA standards, TÜV approved

	LED lamp	Incandescent lamp	Neon lamp
Full-voltage (without transformer)	Max. 24V AC/DC	Max. 30V AC/DC	Max. 240V AC
With transformer	Max. 550V AC (Short-body type: Max. 220V AC)		–

Selector Switches AR22

3-position

Operator	Operation	Knob color	Contact	Type Switch with round bezel	Switch with square bezel	Contact operation (Example)			
						Contact arrange- ment	Operation position		
							L	C	R
 AF94-310	Maintained each 45°	Color code: B: Black (Standard) Color other than above are available (G: Green) (R: Red)	1NO+1NC 2NO 2NC 2NO+2NC	AR22PR-311B AR22PR-320B AR22PR-302B AR22PR-322B	AR22PY-311B AR22PY-320B AR22PY-302B AR22PY-322B	1NO+1NC (1) (2)	Upper contact ③ ④	Lower contact ① ②	
	Spring/manual return ⤴ each 45°		1NO+1NC 2NO 2NC 2NO+2NC	AR22PR-611B AR22PR-620B AR22PR-602B AR22PR-622B	AR22PY-611B AR22PY-620B AR22PY-602B AR22PY-622B	1NO+1NC (1) (2)	Upper contact ③ ④	Lower contact ① ②	
	Spring/manual return ⤵ each 45°		1NO+1NC 2NO 2NC 2NO+2NC	AR22PR-711B AR22PR-720B AR22PR-702B AR22PR-722B	AR22PY-711B AR22PY-720B AR22PY-702B AR22PY-722B	1NO+1NC (1) (2)	Upper contact ③ ④	Lower contact ① ②	
	Spring return ⤴ each 45°		2NO+2NC	AR22PR-122B AR22PY-122B	2NO+2NC (1) (2)	Upper contact ① ②	Lower contact ① ②	③ ④	③ ④
 AF94-324	Maintained each 45°		1NO+1NC 2NO 2NC 2NO+2NC	AR22WR-311B AR22WR-320B AR22WR-302B AR22WR-322B	AR22WY-311B AR22WY-320B AR22WY-302B AR22WY-322B	1NO+1NC (1) (2)	Upper contact ③ ④	Lower contact ① ②	
	Spring/manual return ⤴ each 45°		1NO+1NC 2NO 2NC 2NO+2NC	AR22WR-611B AR22WR-620B AR22WR-602B AR22WR-622B	AR22WY-611B AR22WY-620B AR22WY-602B AR22WY-622B	1NO+1NC (1) (2)	Upper contact ③ ④	Lower contact ① ②	
	Spring/manual return ⤵ each 45°		1NO+1NC 2NO 2NC 2NO+2NC	AR22WR-711B AR22WR-720B AR22WR-702B AR22WR-722B	AR22WY-711B AR22WY-720B AR22WY-702B AR22WY-722B	1NO+1NC (1) (2)	Upper contact ③ ④	Lower contact ① ②	
	Spring return ⤴ each 45°		2NO+2NC	AR22WR-122B AR22WY-122B	2NO+2NC (1) (2)	Upper contact ① ②	Lower contact ① ②	③ ④	③ ④
 AF94-308	Maintained each 45°		1NO+1NC 2NO 2NC 2NO+2NC	AR22RR-311B AR22RR-320B AR22RR-302B AR22RR-322B	AR22RY-311B AR22RY-320B AR22RY-302B AR22RY-322B	1NO+1NC (1) (2)	Upper contact ③ ④	Lower contact ① ②	
	Spring/manual return ⤴ each 45°		1NO+1NC 2NO 2NC 2NO+2NC	AR22RR-611B AR22RR-620B AR22RR-602B AR22RR-622B	AR22RY-611B AR22RY-620B AR22RY-602B AR22RY-622B	1NO+1NC (1) (2)	Upper contact ③ ④	Lower contact ① ②	
	Spring/manual return ⤵ each 45°		1NO+1NC 2NO 2NC 2NO+2NC	AR22RR-711B AR22RR-720B AR22RR-702B AR22RR-722B	AR22RY-711B AR22RY-720B AR22RY-702B AR22RY-722B	1NO+1NC (1) (2)	Upper contact ③ ④	Lower contact ① ②	
	Spring return ⤴ each 45°		2NO+2NC	AR22RR-122B AR22RY-122B	2NO+2NC (1) (2)	Upper contact ① ②	Lower contact ① ②	③ ④	③ ④