

■ Pushbuttons, Selector Switches, Pilot Lights, Buzzers

● Command switches <AH164/AH165/AH165-2/AH225/AG225/AH16P/AH16P-2/AH22P Series>

Type	Model	Rating				TÜV license No.	EN/IEC/ others
		Withstand voltage [V]	Continuous current [A]	Voltage [V]	Operational current [A] ¹		
AH164 AH165 AH165-2 AH225 AG225 AH16P AH16P-2 AH22P	(Illuminated) pushbutton switches <Except AH165-V, V1> ²	250V AC/DC	5	240V AC	0.3	R9250087	EN60947-5-1
				24V DC	0.7		
	Pushbutton switches <For AH165-V, V1> Selector switches <For AH165-JM, RJM>		5	240V AC	0.3	J9551059	
				24V DC	0.7		
(Illuminated) selector switches <Except AH165-JM,RJM>	5	240V AC	0.3	R9250088			
Pilot lights ²	-	-	-	R9250089			
AH165	Emergency stop pushbutton switches	250V AC/DC	5	240V AC 24V DC	0.3 0.7	R9950093	EN60947-5-1 EN60947-5-5
AH164	Buzzers	60V AC/DC	-	-	-	J9950092	EN60947-5-1
AH165							

¹ Rated operating current is 15A for AC-15, and 13A for DC-13.

² The AH164/165 illuminated type with spot LED or two-color LED has not been approved.

● Command switches <AR22/DR22/AR30/DR30/AM22/DM22/AG28/DG28 Series>

a. Illuminated pushbutton switches series

Bezel	Operator	Type								TÜV license No.	EN/IEC/ others
		AR22		AR30		AM22		AG28			
		Momentary	Alternate	Momentary	Alternate	Momentary	Alternate	Momentary	Alternate		
Round bezel	Flush round head	AR22F0L	AR22F5L	-	-	AM22F0L	AM22F5L	-	-	R9551062	EN60947-5-1
	Extended round head	AR22E0L	AR22E5L	AR30E0L	AR30E5L	AM22E0L	AM22E5L	-	-		
	Mushroom head (40mm dia.)	AR22M0L	AR22M5L	-	-	AM22M0L	AM22M5L	-	-		
	Mushroom head (29mm dia.)	AR22M4L	AR22M9L	-	-	AM22M4L	AM22M9L	-	-		
	Extended with transparent full guard (24mm dia.)	AR22G4L	AR22G9L	AR30G4L	AR30G9L	AM22G4L	AM22G9L	-	-		
	Extended with full guard (24mm dia.)	AR22G1L	AR22G6L	AR30G3L	AR30G8L	-	-	-	-		
	Extended with transparent full guard (24mm dia. with openings)	AR22G2L	AR22G7L	AR30G2L	AR30G7L	AM22G2L	AM22G7L	-	-		
	Push-locked, turn-reset (40mm dia. with white arrow)	AR22V5L (Returning method: turn-reset)		AR30V5L (Returning method: turn-reset)		-	-	-	-		
Push-pull	-	-	AR30Q7L (Returning method: automatic-return)		-	-	-	-			
Square bezel	Flush square head	AR22F0M	AR22F5M	-	-	-	-	AG28F0M	AG28F5M		
	Extended square head	AR22E0M	AR22E5M	-	-	-	-	-	-		
	With full guard ring	-	-	-	-	-	-	AG28G2M	AG28G7M		
	Flush round head	AR22F0P	AR22F5P	-	-	-	-	-	-		
	Extended round head	AR22E0P	AR22E5P	-	-	-	-	-	-		
	Mushroom head (29mm dia.)	AR22M4P	-	-	-	-	-	-	-		

b. Pushbutton switches

Bezel	Operator	Type								TÜV license No.	EN/IEC/ others
		AR22		AR30		AM22		AG28			
		Momentary	Alternate	Momentary	Alternate	Momentary	Alternate	Momentary	Alternate		
Round bezel	Flush round head	AR22F0R	AR22F5R	AR30F0R	AR30F5R	AM22F0R	AM22F5R	-	-	R9551062	EN60947-5-1
	Extended round head	AR22E0R	AR22E5R	AR30E0R	AR30E5R	AM22E0R	AM22E5R	-	-		
	Mushroom head (40mm dia.)	AR22M0R	AR22M5R	AR30M0R	AR30M5R	AM22M0R	AM22M5R	-	-		
	Mushroom head (29mm dia.)	AR22M4R	AR22M9R	AR30M4R	-	AM22M4R	-	-	-		
	Extended with full guard (24mm dia.)	AR22G3R	AR22G8R	-	-	AM22G3R	AM22G8R	-	-		
	Flush with full guard (24mm dia.)	AR22G2R	AR22G7R	-	-	-	-	-	-		
	With full guard ring (24mm dia.)	-	-	AR30G1R	AR30G6R	-	-	-	-		
	Mushroom head with full guard (40mm dia.)	AR22M3R	-	AR30M3R	-	AM22M3R	AM22M8R	-	-		
	Extended with half guard	AR22G0R	AR22G5R	AR30G0R	AR30G5R	-	-	-	-		
	Pin lock	-	-	AR30GPR	-	-	-	-	-		
	Giant head	-	-	AR30B0R	-	-	-	-	-		
	Pushbutton with selector ring (2-position)	AR22S1R, S2R, S3R, S6R	-	AR30S1R, S2R, S3R, S6R	-	-	-	-	-		
	Push, turn-lock	-	-	AR30N0R	-	-	-	-	-		
	Pushbutton with emergency operating cap	-	-	AR30FVR	-	-	-	-	-		
	Mushroom head with full guard (35mm dia. metal nut)	-	-	AR30GSR	-	-	-	-	-		
	Giant head with full guard	-	-	AR30B2R	-	-	-	-	-		
	Giant head with full guard	-	-	AR30B3R	-	-	-	-	-		
	Giant head with guard	-	-	AR30B1R	-	-	-	-	-		
Push-lock, turn-reset (40mm dia. with white arrow)	AR22V5R (Returning method: turn-reset)	-	AR30V5R (Returning method: turn-reset)	-	-	-	-	-			
Square bezel	Flush square head	AR22F0S	AR22F5S	-	-	-	-	AG28F0S	AG28F5S		
	Extended square head	AR22E0S	AR22E5S	-	-	-	-	-	-		
	Flush with full guard	-	-	-	-	-	-	AG28G2S	AG28G7S		
	Flush round head	AR22F0Y	AR22F5Y	-	-	-	-	-	-		
	Extended round head	AR22E0Y	AR22E5Y	-	-	-	-	-	-		
	Mushroom head (29mm dia.)	AR22M4Y	-	-	-	-	-	-	-		
	With selector ring (24mm dia.)	-	-	-	-	-	-	AG28S2Y	-		

c. Emergency stop pushbutton switches

Bezel	Operator	Type						TÜV license No.	EN/IEC/ others
		AR22		AR30		AM22			
		Non-illuminated	Illuminated	Non-illuminated	Illuminated	Non-illuminated	Illuminated		
Round bezel	Push-lock, turn-reset (29mm dia.) (with white arrow)	AR22V0R	AR22V0L	AR30V0R	AR30V0L	AM22V0E	AM22V0F	R50028146	EN60947-5-1 EN60947-5-5
	Push-lock, turn-reset (40mm dia.)	AR22V2R	AR22V2L	AR30V2R	AR30V2L	-	-		
	Push-lock, turn-reset (29mm dia.) (with white arrow)	AR22VSR	AR22VSL	-	-	AM22VSE	AM22VSF		
	Push-lock, turn-reset (40mm dia.)	AR22V4R	-	-	-	-	-		
	Key-release push-lock, turn reset (40mm dia.)	AR22V7R	-	-	-	-	-		
	Push-lock, pull-reset (35mm dia.)	AR22Q2R	-	AR30Q2R	-	-	-		
	Push-lock, turn-reset (40mm dia.) (transparent in all colors, with white arrow)	-	AR22VDL	-	-	-	AM22VDF		
	Push-lock, turn-reset (40mm dia.) (transparent in all colors)	-	AR22VAL	-	-	-	-		
Push-lock, turn-reset (65mm dia.) (with white arrow)	-	-	AR30V1R	-	-	-	R50028137	EN60947-5-1 EN60947-5-5	
Unibody push-lock, turn-reset (40mm dia.) (with white arrow)	AR22VGE	AR22VGF	-	-	-	-			

d. Pilot lights

Bezel	Lens	Type				TÜV license No.	EN/IEC/ others
		DR22	DR30	DM22	DG28		
Round bezel	Dome	DR22D0L	DR30D0L	DM22D0L	-	R9551061	EN60947-5-1
	Extended round	DR22E3L	DR30E3L	DM22E3L	-		
	Faceted	DR22K0L	DR30K0L	DM22K0L	-		
Square bezel	Dimmer dome (24mm dia.)	-	DR30D1L	-	-	R9551061	EN60947-5-1
	Flush square	DR22F3M	-	-	DG28F3M		
	Flush square (transparent lens)	DR22F4M	-	-	-		
	Flush square (12mm high frame)	DR22F5M	-	-	-		
	Extended square	DR22E3M	-	-	-		
	Flush rectangular (24x31)	DR22E3N	-	-	-		
	Flush square (transparent lens)	-	DR30F4M ^{*1}	-	-		
	Flush rectangular (36x30) (transparent lens)	-	DR30F4N ^{*1}	-	-		
	Flush square large type (transparent lens)	-	DR30M4M ^{*1}	-	-		
	Extended round	DR22E3P	-	-	-		

Note1: With resistor unit and resistor type: Not approved.

*1 LED 12VAC type: Not approved.

e. Selector/illuminated selector switches

Bezel	Operator	Type								TÜV license No.	EN/IEC/ others
		AR22		AR30		AM22		AG28			
		Non-illuminated	Illuminated	Non-illuminated	Illuminated	Non-illuminated	Illuminated	Non-illuminated	Illuminated		
Round bezel	Knob	AR22PR, PCR	AR22PL	AR30PR, PCR	AR30PL	AM22PR, PCR	AM22PL	-	-	R9551060	EN60947-5-1
	Lever	AR22WR, WCR	-	AR30WR, WCR	-	AM22WR, WCR	-	-	-		
	Cylindrical knob	AR22RR, RCP	-	-	-	-	-	-	-		
	Key	AR22JR, JCR	-	AR30JR, JCR	-	AM22JR, JCR	-	-	-		
	Key (long durability)	AR22JAR	-	AR30JAR	-	-	-	-	-		
Square bezel	Knob	AR22PY, PCY	AR22PP	-	-	-	-	AG28PY	AG28PP	R9551060	EN60947-5-1
	Lever	AR22WY, WCY	-	-	-	-	-	-	-		
	Cylindrical knob	AR22RY, RCY	-	-	-	-	-	-	-		
	Key	AR22JY, JCY	-	-	-	-	-	-	-		

f. Joy stick selector switches (Lever switches)

Bezel	Handle	Type				TÜV license No.	EN/IEC/ others
		AR22		AR30			
		Manual return	Automatic return	Manual return	Automatic return		
Round bezel	Ball type (without lock)	AR22A0□	AR22A5□	AR30A0□	AR30A5□	R2050803	EN60947-5-1
	Ball type (with lock)	AR22A1□	AR22A6□	AR30A1□	AR30A6□		
	Rubber cap type (without lock)	AR22A2□	AR22A7□	AR30A2□	AR30A7□		

g. Buzzers

Bezel	Sound	Type		TÜV license No.	EN/IEC/ others
		DR22	DR30		
Round bezel	Electronic sound (IP54)	DR22B8	DR30B8	J9950091	EN60947-5-1