# **Control Stations**

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Flush Silhouette

Control Units

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Display Units

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Power Supplies

PLCs & SmartRelay

Operator Interfaces

Sensors

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Explosion Protection

## Control Stations (Selection Guide)

Туре	KGNW	KGN	AGAW
Enclosures Type	Single Column Type	Single Column Type	Single Column Type
Appearance		00000	
Degree of Protection	IP40 (IEC 60529, JEM1030), Enclosed type	IP40 (IEC 60529, JEM1030), Enclosed type	IP65 (IEC 60529, JEM1030), Waterproof (JIS C 0920) (Note)
Material (Box)	Sheet steel	Sheet steel	Die-cast aluminum
Coating Color	5Y7/1 semi-gloss, melamine coating		5Y7/1 semi-gloss, melamine coating (outside only)
Standard Operating Conditions	Ambient temperature: -25 to +50°C (no free Relative humidity: 45 to 85% (no conde		
Enclosure Style	Wall mount (1 to 4 holes)	Wall mount (1 to 5 holes)	Wall mount (1 to 4 holes) Stand (1 to 4 holes)
Cable Lead-in (Wall Mount Type)	Double knockouts On top: ø22 and ø27 mm On bottom: ø16 and ø20 mm	Double knockouts On top: ø22 and ø27 mm On bottom: ø16 and ø20 mm	Entrance hub (Gland hubs are also available) 1 to 3 holes: HNA22 G3/4 (22 mm) 1 4 holes: HNA33 G1 (28 mm) 1
Applicable Control Units	IDEC ø22 mm TW/HW series control units	IDEC ø30 mm series control units	IDEC ø22 mm TW/HW series control units
Enclosure Size	100, 150, 200H 80W 76D mm	100, 150, 200, 250, 300H 80W 76D mm	150, 200H 86W 82D mm
Page	1282	1285	1288

Туре	AGA			
Enclosures Type	Single Column Type	Multiple Column Type		
Appearance				
Degree of Protection	IP65 (IEC 60529, JEM1030), Waterproof (JIS C 0920) (Note)			
Material (Box)	Die-cast aluminum or cast aluminum			
Coating Color	5Y7/1 semi-gloss, melamine coating (outside only)			
Standard Operating Conditions	Ambient temperature: -25 to +50°C (no free Relative humidity: 45 to 85% (no conde			
Enclosure Style	Wall mount (1 to 5 holes)  Stand (1 to 5 holes)  Wall mount: 4 or 5 holes 2 column 6 holes 2 or 3 column Stand: 4 or 5 holes 2 column 6 holes 2 or 3 column 6 holes 2 or 3 column			
Cable Lead-in (Wall Mount Type)	Entrance hub (Gland hubs are also available) Standard depth control boxes 1 to 3 holes: HNA22 G3/4 (22 mm) 1 4 or 5 holes: HNA33 G1 (28 mm) 1 Deep type control boxes 1 or 2 holes: HNA22 G3/4 (22 mm) 1 3 to 5 holes: HNA33 G1 (28 mm) 1	Entrance hub (Gland hubs are also available) 4 to 6 holes × 2 columns: HNA33 PF1 (28 mm) 2 6 holes × 3 columns: HNA33 PF1 (28 mm) 3		
Applicable Control Units	IDEC ø30 mm series control units, AM ammeter (except enclosed type units)			
Enclosure Size	Standard depth enclosures:   2 columns: 320H   210W   100   150, 200, 300H   86W   82D mm   2 columns: 380H   280W   130   280W   130			
Page	1292	1298		

Note: The degree of protection for AGAW, AGA, and AGS depends on the control units to be mounted.

Mounted Control Units	Degree of Protection
Pushbutton Pilot light Illuminated push- button Selector switch Selector pushbutton Mono-lever switch AC cam switch AZ electromagnetic buzzer AM ammeter	IP65 (IEC 60529 JEM1030) Waterproof type (JIS C 0920)
Key switch Key reset switch Key cam switch Key selector switch	IP54 (IEC 60529 JEM1030) Splash-proof type (JIS C 0920)
Square pushbutton Square pilot light UC cam switch (Type No. starting with U)	IP40 (IEC 60529 JEM1030)

For AGA series deep type enclosures, 1 or 2 holes: HNA22 G3/4 (22 mm) 1 3 to 5 holes: HNA33 G1 (28 mm) 1



### Control Stations (Selection Guide)

Type	Į	GS	
Enclosures Type	Single Column Type	Multiple Column Type	Flush
Appearance			Silhouet  Control Units  Display Lights  Display Units  Safety Product:
Degree of Protection	IP65 (IEC 60529, JEM1030), Waterproof (JIS C 0920) (Note 1)		Termina Blocks
Material (Box)	Stainless steel		1
Coating Color	5Y7/1 semi-gloss, melamine coating (outside only)	5Y7/1 semi-gloss, melamine coating (both inside and outside)	Comm.
Standard Operating Conditions	Ambient temperature: -25 to +50°C (no freezing) Relative humidity: 45 to 85% (no condensation)		Termina
Enclosure Style	Wall mount (1 to 5 holes) Stand (1 to 5 holes)	Wall mount (3 to 5 holes 2 columns, 3 to 5 holes 3 columns) Stand (3 to 5 holes 2 columns, 3 to 5 holes 3 columns)	AS-Interfa
Cable Lead-in (Wall Mount Type)	Reducer bushing for connecting a thick steel conduit to lead in cables 1 to 3 holes: G3/4 (22 mm) 1 4 or 5 holes: G1 (28 mm) 1	Reducer bushing for connecting a thick steel conduit to lead in cables 2 or 3 holes 2 columns: G3/4 (22 mm) 2 4 or 5 holes 2 columns: G1 (28 mm) 2	Relays 8 Timers
	, ,	2 or 3 holes 3 columns: G3/4 (22 mm) 3 4 or 5 holes 3 columns: G1 (28 mm) 3	Sockets
Applicable Control Units	IDEC ø30mm series control units, AM ammeter (except enclosed	type units)	
Enclosure Size	150, 200H 90W 107D mm (1 to 3 holes) 350H 118W 107D mm (4 or 5 holes)	230, 350H 220W 108D mm (2 columns) 250, 350H 310W 108D mm (3 columns)	Circuit Protecto
Page	1	304	<b>1</b>

### **Safety Precautions**

Be sure to turn off power before mounting, removal, wiring, maintenance, and inspection. Otherwise, electric shock or fire hazard may occur.

Use wires of a proper size to meet voltage and current requirements. Tighten terminal screws with a proper tightening torque. Loose terminal screws may cause abnormal heat and fire. Check periodically for looseness due to vibrations.

To avoid burning your hand, use a lamp holder tool when replacing lamps.

Be sure to use within the rated specifications. Otherwise, electric shock or fire may occur.

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## KGNW Series Control Stations

### IP40 Enclosed Steel Control Stations Mounting of ø22 mm Control Units with Space-Saving Design

The KGNW control stations are designed for mounting IDEC  $\emptyset$ 22 mm (7/8 inch) control units.

- Various standard control stations are available from one to four holes with most widely used combinations of control units (contact configurations, voltage, button colors, and nameplates).
- Enclosures only are also available, in which specifically selected TW series control units can be mounted as required.

Ideal for small control stations

KGNW Control Station with four ø22 mm control units



KGN Control Station with three ø30 mm control units

• HW series can also be installed.

### **Specifications**

Degree of Protection	IP40 (IEC 60529, JEM1030)
Material (Box)	Steel
Coating Color (Melamine coating)	Yellow semi-gloss (Munsell 5Y7/1)
Rated Insulation Voltage	600V
Insulation Resistance	5 MΩ minimum
Dielectric Strength	Between live and dead parts: 2500V AC, 1 minute
Standard Operating Conditions	Ambient temperature: -25 to +50°C (no freezing) Relative humidity: 45 to 85% (no condensation)
Enclosure Style	Wall mount (1 to 4 holes)
Cable Lead-in (Wall Mount Type)	Double knockouts On top: ø22 and ø27 mm On bottom: ø16 and ø20 mm
Applicable Control Units	IDEC ø22 mm TW series control units

### **Contact Ratings (Contact Block)**

<u> </u>	,
Rated Insulation Voltage	600V
Rated Thermal Current	10A
Contact Ratings by Utilization	AC-15 (A600) DC-13 (P600)
	Rated Thermal Current

### Operational Voltage and Current by Utilization Category

Ор	erationa	ıl Voltage	24V	48V	50V	110V	220V	440V
ent	AC (50/	AC-12 Control of resistive loads and solid state loads	10A	_	10A	10A	6A	2A
nal Curr	60Hz)	AC-15 Control of electromagnetic loads (>72VA)	10A	_	7A	5A	ЗА	1A
Operational Current	DC	DC-12 Control of resistive loads and solid state loads	8A	4A	_	2.2A	1.1A	-
		DC-13 Control of electromagnets	4A	2A	_	1.1A	0.6A	_

#### Common

Minimum applicable load (reference value) = 3V AC/DC, 5 mA (the applicable range is subject to change according to the operating conditions)

### • Rubber Bushing (Supplied) Color: Black

Enclosure	Supplied Bushing Applicab			
Style	Type No.	Outside Dia.	Inside Dia.	Knockout Hole
1 or 2 holes	GB-2	ø30 mm	ø16 mm	ø20 or ø22 mm
3 or 4 holes	GB-3	ø38 mm	ø20 mm	ø27 mm



### Control Unit Mounting Holes

The holes for mounting control units are 22.2 mm in diameter with an anti-rotation notch.

Mounting centers are 50 mm on 2- and 3-hole enclosures, and 36 mm on 4-hole enclosures.

#### Double Knockouts

The top and bottom surfaces have double knockouts.

On top: ø22 and ø27 mm double knockouts On bottom: ø16 and ø20 mm double knockouts

One rubber bushing is supplied to protect lead-in wires from damage on the wire surface; 1- and 2-hole enclosures are supplied with a bushing to fit  $\emptyset$ 20 and  $\emptyset$ 22mm holes, and 3- and 4-hole enclosures with a bushing to fit a  $\emptyset$ 27 mm hole.



### KGNW Series Control Stations

### **Control Stations with Control Units**

The control stations are available with selected combination of control units as listed below. For the dimensions and mounting centers, see the figures on page 1284.

Control Unit	Type No.	Specifications
	ABW110 *	Flush, 1NO
Pushbutton	ABW101 *	Flush, 1NC
(PB)	ABW111 *	Flush, 1NO-1NC
	ABW411 *	ø40 mushroom, 1NO-1NC
Pilot Light	APW116 *	Round flush, 110V AC
PL (Incandescent)	APW126 *	Round flush, 220V AC
Selector Switch	ASW211	Knob, 2-position, 1NO-1NC
Selector Switch	ASW320	Knob, 3-position, 2NO
	ASW2K11	Key, 2-position, 1NO-1NC

Note: Specify a button or lens color code in place of \*: Pushbutton: B (black), G (green), R (red) Pilot Light: G (green), R (red), W (white)

### **Type List**

Type	List	Package Quantity: 1			
Co	ontrol Station	Mounted Control Units			
Style	Type No. (Ordering Type No.)	Symbol	Type No.	NWA Nameplate Legend	
	KGNW1101Y	PB	ABW110B	ON	
	KGNW1102Y	PB	ABW411R	Without nameplate	
Wall Mount / 1 hole	KGNW1103Y	PL	APW116R	Without nameplate	
/Jount	KGNW1104Y	PL	APW126R	Without nameplate	
Wall N	KGNW1105Y	SS	ASW211	HAND-AUTO	
	KGNW1106Y	SS	ASW320	HAND-OFF-AUTO	
	KGNW1107Y	SS	ASW2K11	OFF-ON	
	KGNW2101Y	(B) (B)	ABW110B ABW101R	ON OFF	
	KGNW2102Y	(PB) (PB)	ABW111B ABW111R	ON OFF	
	KGNW2103Y	PL PL	APW116R APW116G	Without nameplate	
	KGNW2104Y		APW126R APW126G	Without nameplate	
holes	KGNW2105Y	PL PB	APW116R ABW111R	Without nameplate STOP	
Wall Mount / 2 holes	KGNW2106Y	PL PB	APW126R ABW111R	Without nameplate STOP	
Wall I	KGNW2107Y		APW116R ASW211	Without nameplate HAND-AUTO	
	KGNW2108Y	PL SS	APW126R ASW211	Without nameplate HAND-AUTO	
	KGNW2109Y	PL SS	APW116R ASW2K11	Without nameplate OFF-ON	
	KGNW2110Y		APW126R ASW2K11	Without nameplate OFF-ON	
	KGNW2113Y	B	ABW110B ABW411R	ON Without nameplate	

Co	ntrol Station	Mounted Control Units		
Style	Type No. (Ordering Type No.)	Symbol	Type No.	NWA Nameplate Legend
	KGNW3102Y	PL PB PB	APW116R ABW110B ABW101R	Without nameplate ON OFF
Wall Mount / 3 holes	KGNW3103Y	(L) (B) (B)	APW126R ABW110B ABW101R	Without nameplate ON OFF
Wall Moun	KGNW3104Y	P P S	ABW111B ABW111R ASW211	ON OFF HAND-AUTO
	KGNW3105Y		APW116W APW116R APW116G	Without nameplate
t / 4 holes	KGNW4101Y		APW126R APW126G ABW111B ABW111R	Without nameplate Without nameplate ON OFF
Wall Mount / 4 holes	KGNW4102Y		APW126R ABW111B ABW111R ASW211	Without nameplate ON OFF HAND-AUTO

Flush Silhouette Control Units Display Lights

Display Units Safety Products

Terminal Blocks Comm. Terminals

AS-Interface

Sockets

Circuit Protectors

Power Supplies

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Control Stations

Explosion Protection

### **Empty Enclosures**

### Package Quantity: 1

Empty Enclo	ı	Package Quantity: 1		
Style	Type No. (Ordering Type No.)	Unit Mounting Hole	Control Unit Mounting Centers	
1 hole	KGNW111Y	With		
(approx. 0.4 kg)	KGN110Y	Without		
2 holes	KGNW212Y	With	288	
(approx. 0.5 kg)	KGN210Y	Without	8	
3 holes	KGNW313Y	With	- 8	
(approx. 0.6 kg)	KGN310Y	Without	47 47	
4 holes (approx. 0.6 kg)	KGNW314Y	With	36 16 20 36	
Control Unit Mounting Hole     Effective Depth inside the Enclosure				
022.2	355	Front	70 1	

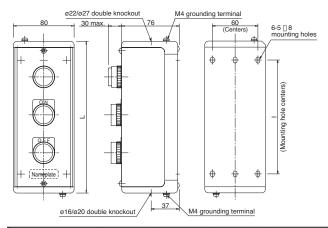
### Accessories

### Package Quantity: 1

Product Name	Type No.	Applicable Enclosure	Applicable Knockout Hole
Rubber Bushing	GB-2	KGNW111Y KGNW212Y	ø20 or ø22 mm
	00.0	KGNW313Y	~07
	GB-3	KGNW314Y	ø27 mm

### **Dimensions**

### • KGNW

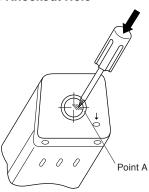


	1 hole	2 holes	3 holes	4 holes
L	100	150	20	00
I	50	100	15	50
Weight (Approx.)	0.3 kg	0.4 kg	0.5	i kg

### Instructions

### • Precautions for Opening the Knockout Hole

- 1. The metal piece for the inner hole of ø22 or ø16 mm knockout has two linked parts to the outer hole. When breaking the knockout to make an inner hole, strike the inner metal piece at the cut parts (the hatched parts shown as point A at right) using a screwdriver tip or similar tool.
- When opening a larger hole of ø27 or ø20 mm, first make a smaller hole as described above. Then break the knockout for the larger hole using pliers.



### **Ordering Information**

- When ordering control stations with control units: Specify the Ordering Type No. of the control station.
- When ordering enclosures without control units: Specify the following items.
  - 1. Ordering Type No. of the enclosure
  - Ordering Type No. and specifications of the control unit to be mounted (lens color, button color, etc.)
  - 3. Nameplate
  - 4. Other specifications

### **Ordering Example**

1) 2 3		Type No. of Enclos	KGNW313Y	
		Control Unit and Nameplate	1	APW126R
			2	ABW210G, with NWA-1
			3	ABW201R, with NWA-2

Note: Any ø22 mm TW series control units are selectable. Take the effective depth inside the enclosure into consideration.

## KGN Series Control Stations

### IP40 Enclosed Steel Control Stations For ø30 mm Series Control Units Various Control Stations are Available

Various control stations are available from one to five holes with most widely used combinations of control units (contact configurations, voltage, button colors, and nameplates).

**Specifications** 

Degree of Protection	IP40 (IEC 60529, JEM1030)
Material (Enclosure)	Steel
Coating Color (Melamine coating)	Yellow semi-gloss (Munsell 5Y7/1)
Rated Insulation Voltage	600V (Buzzer: 250V)
Insulation Resistance	5 MΩ minimum
Dielectric Strength (Note 1)	Between live and dead parts: 2500V AC, 1 minute
Standard Operating Conditions (Note 2)	Ambient temperature: -25 to +50°C (no freezing) Relative humidity: 45 to 85% (no condensation)
Enclosure Style	Wall mount (1 to 5 holes)
Cable Lead-in (Wall Mount Type)	Double knockouts On top: ø22 and ø27 mm On bottom: ø16 and ø20 mm
Applicable Control Units	IDEC ø30 mm series control units

Note 1: Buzzer: 2000V AC, 1 minute Note 2: Buzzer: -10 to +40°C

### **Contact Ratings (Contact Block)**

		• (	,
		Rated Insulation Voltage	600V
	Contact Block	Rated Thermal Current	10A
		Contact Ratings by Utilization	AC-15 (A600)
		Category IEC60947-5-1	DC-13 (P600)

### • Operational Voltage and Current by Utilization Category

operational restage and e				,				9,
Operational Voltage			24V	48V	50V	110V	220V	440V
ent	AC (FO)	AC-12 Control of resistive loads and solid state loads	10A	_	10A	10A	6A	2A
nal Curr	(50/ 60Hz)	AC-15 Control of electromagnetic loads (>72VA)	10A	_	7A	5A	ЗА	1A
Operational Current	DC	DC-12 Control of resistive loads and solid state loads	8A	4A	_	2.2A	1.1A	_
		DC-13 Control of electromagnets	4A	2A	_	1.1A	0.6A	_

### • Common

Minimum applicable load (reference value) = 3V AC/DC, 5 mA (the applicable range is subject to change according to the operating conditions)

### • Rubber Bushing (Supplied) Color: Black

Enclosure	Supplied Bushing			Applicable
Style	Type No.	Outside Dia.	Inside Dia.	Knockout Hole
1 or 2 holes	GB-2	ø30 mm	ø16 mm	ø20 or ø22 mm
3 or 4 holes	GB-3	ø38 mm	ø20 mm	ø27 mm

### • Control Unit Mounting Holes

The holes for mounting control units are 30.5 mm in diameter with an anti-rotation notch. Mounting centers are 50 mm.

### Double Knockouts

The top and bottom surfaces have double knockouts.

On top: Ø22 and Ø27 mm double knockouts On bottom: Ø16 and Ø20 mm double knockouts

One rubber bushing is supplied to protect lead-in wires from damage on the wire surface; 1- and 2-hole enclosures are supplied with a bushing to fit  $\emptyset$ 20 and  $\emptyset$ 22 mm holes, and 3- and 5-hole enclosures with a bushing to fit a  $\emptyset$ 27 mm hole.

20 mm double knockouts Supplies

Control Stations

Silhouette

Control

Display

Display

Safety Products

Terminal

Comm. Terminals

AS-Interface

Relays &

Timers

Sockets

Circuit Protectors

PI Cs &

SmartRelay

Operator Interfaces

Protection



### **Control Stations with Control Units**

The control stations are available with a selected combination of control units as listed below. For the dimensions and mounting centers, see the figures on page 1287.

Control Unit	Type No.	Specifications	
	ABN110 *	Flush, 1NO	
	ABN101 *	Flush, 1NC	
	ABN111 *	Flush, 1NO-1NC	
Pushbutton	ABN311R	ø40 mushroom, 1NO-1NC	
PB	ABBN1110 **	Flush, double beam latching, 1NO	
9	ABBN1111 **	Flush, double beam latching, 1NO-1NC	
	ATN420	Toggle lever, 2NO	
	HN1E-BV411R	Emergency stop, 1NO-1NC	
Pilot Light	APN118 *	Dome, 110V AC (2W)	
PL (Incandescent)	APN128 *	Dome, 220V AC (2W)	
Colootor Cwitch	ASN311	Knob, 2-position, 1NO-1NC	
Selector Switch	ASN111	Knob, 3-position, 1NO-1NC	
	ASN3K11	Key, 2-position, 1NO-1NC	
Buzzer	AZ11N	110V AC	
(BZ)	AZ12N	220V AC	

Note: Specify a button or lens color code in place of \*:
Pushbutton: B (black), G (green), R (red)
Pilot Light: G (green), R (red), W (white)
Flush pushbuttons are supplied with black, green, and red color

### **Type List**

Package Quantity: 1

Co	ntrol Station		Mounted Con	trol Units
Style	Type No. (Ordering Type No.)	Symbol	Type No.	NA Nameplate Legend
	KGN1101NY	PB	ABN110	ON
	KGN1102NY	PB	ABN311R	OFF
	KGN1103NY	PL	APN118R	Without nameplate
hole	KGN1104NY	(PL)	APN128R	Without nameplate
Wall Mount / 1 hole	KGN1105NY	SS	ASN311	HAND-AUTO
I Mou	KGN1106NY	SS	ASN111	HAND-OFF-AUTO
Wal	KGN1107NY	SS	ASN3K11	OFF-ON
	KGN1108NY	(BZ)	AZ11N	Without nameplate
	KGN1110NY	PB	ATN420	Without nameplate ON-OFF on bezel
	KGN1111NY	PB	HN1E- BV411R	EMERGENCY STOP
	KGN2101NY	(PB)	ABN110 ABN101	ON OFF
	KGN2102NY	(PB) (PB)	ABN111 ABN111	ON OFF
holes	KGN2103NY	(P)	APN118R APN118G	Without nameplate
Wall Mount / 2 holes	KGN2104NY	(P)	APN128R APN128G	Without nameplate
Wall N	KGN2105NY	P.B	APN118R ABN111	Without nameplate STOP
	KGN2106NY	P.B	APN128R ABN111	Without nameplate STOP
	KGN2107NY	PL SS	APN118R ASN311	Without nameplate HAND-AUTO

Style	Type No. (Ordering Type No.)	Symbol	Mounted Con Type No.	NA Nameplate
	KGN2108NY			Legend
		(PL) (SS)	APN128R ASN311	Without nameplate HAND-AUTO
	KGN2109NY	PL SS	APN118R ASN3K11	Without nameplate OFF-ON
	KGN2110NY	PL SS	APN128R ASN3K11	Without nameplate OFF-ON
	KGN2111NY	PB PB	ABBN1110	ON OFF
s holes	KGN2112NY	PB PB	ABBN1111	ON OFF
Wall Mount / 2 holes	KGN2113NY	PB PB	ABN110 ABN311R	ON OFF
Wall N	KGN2114NY	PL PB	APN118R ATN420	Without nameplate ON-OFF on bezel
	KGN2116NY	®Z PB	AZ11N ABN111	Without nameplate
	KGN2117NY	®Z PB	AZ12N ABN111	Without nameplate
	KGN2118NY	®Z PL	AZ11N APN118R	Without nameplate
	KGN2119NY	®Z PL	AZ12N APN128R	Without nameplate
	KGN3102NY		APN118R ABN110 ABN101	Without nameplate ON OFF
	KGN3103NY	P B B	APN128R ABN110 ABN101	Without nameplate ON OFF
rt / 3 holes	KGN3104NY	(P) (P) (S)	ABN111 ABN111 ASN311	ON OFF HAND-AUTO
Wall Mount / 3 holes	KGN3106NY		APN128W APN128R APN128G	Without nameplate
	KGN3107NY		APN118R ABBN1110	Without nameplate ON OFF
	KGN3108NY		APN128R ABBN1110	Without nameplate ON OFF
Wall Mount / 4 holes	KGN4101NY		APN128R APN128G ABN111 ABN111	Without nameplate Without nameplate ON OFF
Wall Mour	KGN4102NY		APN128R ABN111 ABN111 ASN311	Without nameplate ON OFF HAND-AUTO

### **Empty Enclosures**

### Package Quantity: 1

Lilipty Lilcio	Suics		Package Quantity: 1	
Style	Type No. (Ordering Type No.)	Unit Mounting Hole	Control Unit Mounting Centers	
1 hole	KGN111Y	With		
(approx. 0.4 kg)	KGN110Y	Without	<u> </u>	
2 holes	KGN211Y	With	200	
(approx. 0.5 kg)	KGN210Y	Without		
3 holes	KGN311Y	With	50	
(approx. 0.6 kg)	KGN310Y	Without		
4 holes	KGN411Y	With	2005	
(approx. 0.7 kg)	KGN410Y	Without		
5 holes	KGN511Y	With	500	
(approx. 0.8 kg)	KGN510Y	Without		
Control Unit Mounting Hole     • Effective Depth inside the Enclosure				
905 31.7				

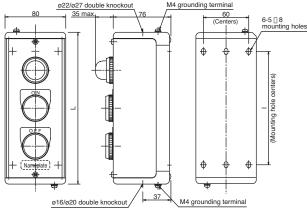
### **Accessories**

### Package Quantity: 1

A0003301100	•	1 0	ackage Quantity. I
Product Name	Type No.	Applicable Enclosure	Applicable Knockout Hole
		KGN111Y	
	GB-2	KGN110Y	ø20 or ø22 mm
	GB-2	KGN211Y	020 01 022 111111
		KGN210Y	
Dubbar Buching	GB-3	KGN311Y	
Rubber Bushing		KGN310Y	
		KGN411Y	ø27 mm
		KGN410Y	027 111111
		KGN511Y	
		KGN510Y	

### **Dimensions**

### • KGN Control Station (Wall Mount)

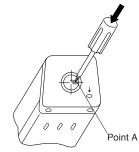


	1 hole	2 holes	3 holes	4 holes	5 holes
L	100	150	200	250	300
I	50	100	150	200	250
Weight (Approx.)	0.3 kg	0.4 kg	0.5 kg	0.6 kg	0.7 kg

### Instructions

### • Precautions for Opening the Knockout Hole

- The metal piece for the inner hole of ø22 or ø16 mm knockout has two linked parts to the outer hole. When breaking the knockout to make an inner hole, strike the inner metal piece at the cut parts (the hatched parts shown as point A at right) using a screwdriver tip or similar tool.
- When opening a larger hole of ø27 or ø20 mm, first make a smaller hole as described above. Then break the knockout for the larger hole using pliers.



### **Ordering Information**

- When ordering control stations with control units: Specify the Ordering Type No. of the control station.
- When ordering enclosures without control units: Specify the following items.
  - 1. Ordering Type No. of the enclosure
  - 2. Ordering Type No. and specifications of the control unit to be mounted (lens color, button color, etc.)
  - 3. Nameplate
  - 4. Other specifications

### Ordering Example

	① ② ③	Type No. of Enclos	KGN311Y	
		Combinal constant	1	APN128R
		Control unit and Nameplate	2	ABN210B, with NA-1
		Namepiate	3	ABN201R, with NA-2

Note: Any ø30 mm series Control Units are selectable. However, take the effective depth inside the enclosure into consideration.

Flush Silhouette

Control

Display Lights

Display Units

Safety Products

Terminal Blocks

Comm. Terminals

AS-Interface

Relays & Timers

Sockets

Circuit

Protectors

Supplies
PLCs &
SmartRelay

Operator

Interfaces

Sensors

Control Stations

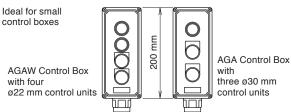
Explosion Protection

## **AGAW** Series Control Stations

## IP65 Waterproof Aluminum Control Stations for ø22 mm Control Units

AGAW control stations are designed for mounting IDEC  $\emptyset 22$  mm (7/8 inch) control units.

- Various control stations are available from one to four holes with most widely used combinations of control units (contact configurations, voltage, button colors, and nameplates).
- Enclosures only are also available, in which specifically selected TW series control units can be installed.



HW series can also be installed.



### **Specifications**

Degree of Protection (Note)	IP65 (IEC 60529, JEM1030) (Key selector switch: Splash-proof IP54)
Material (Box)	Aluminum
Coating Color (Melamine coating)	Yellow semi-gloss (Munsell 5Y7/1, outside only)
Rated Insulation Voltage	600V
Insulation Resistance	5 MΩ minimum
Dielectric Strength	Between live and dead parts: 2500V AC, 1 minute
Standard Operating Conditions	Ambient temperature: -25 to +50°C (no freezing) Relative humidity: 45 to 85% (no condensation)
Enclosure Style	Wall mount (1 to 4 holes) Stand (1 to 4 holes)
Cable Lead-in (Wall Mount Type)	Entrance hub 1 to 3 holes: HNA22 G3/4 (22 mm) 4 holes: HNA33 G1 (28 mm)
Applicable Control Units	IDEC ø22 mm TW series control units

Note: The degree of protection depends on the control units mounted in the enclosure. When IP65 control units are mounted, the entire control station has IP65 characteristics. (See page 1280)

### **Contact Ratings (Contact Block)**

	Rated Insulation Voltage	600V
Contact Block	Rated Thermal Current	10A
Contact Block	Contact Ratings by Utilization	AC-15 (A600)
	Category IEC60947-5-1	DC-13 (P600)

### • Operational Voltage and Current by Utilization Category

Operational Voltage		24V	48V	50V	110V	220V	440V
Operational Current DC DC AC (20 / C) OS)	AC-12 Control of resistive loads and solid state loads	10A	_	10A	10A	6A	2A
	AC-15 Control of electromagnetic loads (>72VA)	10A	_	7A	5A	ЗА	1A
	DC-12 Control of resistive loads and solid state loads	8A	4A	_	2.2A	1.1A	-
		DC-13 Control of electromagnets	4A	2A	_	1.1A	0.6A

#### Commor

Minimum applicable load (reference) = 3V AC/DC, 5mA (the applicable range is subject to change according to the operating conditions)

### Control Unit Mounting Holes

The holes for mounting control units are 22.2 mm in diameter with an anti-rotation notch.

Mounting centers are 50 mm on 2- and 3-hole enclosures, and 36 mm on 4-hole enclosures.

### Waterproof Bushing

Four plastic bushings are provided inside the corners for mounting screws to secure the control station on a panel surface.

### • Lead-in Fittings (Wall Mount Type)

An entrance hub made of aluminum is supplied for connecting a steel conduit to lead in cables.

1 to 3 holes: With HNA22 G3/4 for 22 mm conduit 4 holes: With HNA33 G1 for 28 mm conduit

HNAG type gland hubs for lead in cables are also available.

### • Stand Pole (Stand Type)

The pole is made of carbon steel (STK) pipe, and the base is made of iron. The coating color is the same as the enclosure, yellow (semi-gloss).



### **Control Stations with Control Units**

The control stations are available with a selected combination of control units as listed below. For the dimensions and mounting centers, see the figures on page 1290.

Control Unit	Type No.	Specifications
	ABW110 *	Flush, 1NO
Pushbutton PB	ABW101 *	Flush, 1NC
	ABW111 *	Flush, 1NO-1NC
	ABW411 *	ø40 mushroom, 1NO-1NC
Pilot Light	APW116 *	Round flush, 110V AC
PL (Incandescent)	APW126 *	Round flush, 220V AC
Selector Switch	ASW211	Knob, 2-position, 1NO-1NC
	ASW320	Knob, 3-position, 2NO
	ASW2K11	Key, 2-position, 1NO-1NC

Note: Specify a button or lens color code in place of \*: Pushbutton: B (black), G (green), R (red) Pilot Light: G (green), R (red), W (white)

### Type List

Package Quantity: 1

туре	ype List Package Quantity:							
Со	ntrol Station		Mounted Control Units					
Style	Type No. (Ordering Type No.)	Symbol	Type No.	NWA Nameplate Legend				
elc elc	AGAW1101Y	®	ABW110B	ON				
nt / 1 hc	AGAW1102Y	PB	ABW411R	Without nameplate				
Wall Mount / 1 hole	AGAW1105Y	S	ASW211	HAND-AUTO				
×	AGAW1107Y *	SS	ASW2K11	OFF-ON				
Stand / 1 hole	AGAW1101SY	AW1101SY B ABW110B		ON				
Stand /	AGAW1102SY	PB	ABW411R	OFF				
	AGAW2101Y	(PB) (PB)	ABW110B ABW101R	ON OFF				
	AGAW2102Y	(PB) (PB)	ABW111B ABW111R	ON OFF				
holes	AGAW2103Y	PL PL	APW116R APW116G	Without nameplate				
Wall Mount / 2 holes	AGAW2104Y	PL PL	APW126R APW126G	Without nameplate				
Wall N	AGAW2105Y	PL PB	APW116R ABW111R	Without nameplate STOP				
	AGAW2106Y	PL PB	APW126R ABW111R	Without nameplate STOP				
	AGAW2107Y	PL SS	APW116R ASW211	Without nameplate HAND-AUTO				

Degree of protection marked with \* is splash-proof IP54.

Control Station Mounted Control Units							
	Type No.	Cumbal		NWA Nameplate	Flush		
Style	(Ordering Type No.)	Symbol	Type No.	Legend	Silhouette		
	AGAW2108Y	(PL) (SS)	APW126R ASW211	Without nameplate HAND-AUTO	Control Units		
t / 2 holes	AGAW2109Y *	PL SS	APW116R ASW2K11	Without nameplate OFF-ON	Display Lights		
Wall Mount / 2 holes	AGAW2110Y *	PL SS	APW126R ASW2K11	Without nameplate OFF-ON	Display Units		
>	AGAW2113Y	PB PB	ABW110B ABW411R	ON Without nameplate	Safety Products		
S					Terminal Blocks		
Stand / 2 holes	AGAW2101SY	(B) (B)	ABW110B ABW101R	ON OFF	Comm. Terminals		
	AGAW3102Y   PB   ABW110B   ON ABW101B   OFF		AS-Interface				
oles				Relays & Timers			
Wall Mount / 3 holes	AGAW3103Y		APW126R ABW110B ABW101R	Without nameplate ON OFF	Sockets		
Wall	AGAW3104Y	(PB) (PB)	ABW111B ABW111R	ON OFF	Circuit Protectors		
		SS	ASW211	HAND-AUTO	Power		
3 holes	AGAW3102SY		APW116R ABW110B ABW101R	Without nameplate ON OFF	PLCs & SmartRelay		
Stand / 3 holes	AGAW3104SY	PB PB	ABW111B ABW111R	ON OFF	Operator Interfaces		
		(SS)	ASW211	HAND-AUTO	Sensors		
es	Wall Mount AGAW4101Y	PL PL	APW126R APW126G	Without nameplate Without nameplate	Control		
d / 4 hol	Stand AGAW4101SY	®	ABW111B ABW111R	ON OFF	Stations		
Wall · Stand / 4 holes	Wall Mount AGAW4102Y	PL (PB)	APW126R ABW111B	Without nameplate ON	- Explosion Protection		
Wal	Stand AGAW4102SY	PB	ABW111R ASW211	OFF HAND-AUTO	References		
				1	_		

Degree of protection marked with \* is splash-proof IP54.



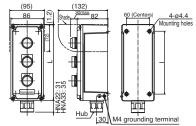
### **Empty Enclosures**

#### Package Quantity: 1

Empty Emologates rackage Quantity.						
Style	Type No. (Ordering Type No.)	Unit Mount- ing Hole	Control Unit Mounting Centers			
1 hole	AGAW211Y	With				
(approx. 0.6 kg)	AGA210Y	Without	Hub HNA22 G3/4 (22mm)			
2 holes (approx. 0.6 kg)	AGAW212Y	With	Hub HNA22 83 G3/4 (22mm)			
3 holes	AGAW313Y	With	\$\frac{2}{2}			
(approx. 0.7 kg)	AGA310Y	Without	Hub HNA22 (G3/4 (22mm))			
4 holes (approx. 0.7 kg)	AGAW314Y	With	Hub HNA33 G1 (28mm)			
Control Unit Mou	nting Hole •	Effective Dept	h inside the Encosure			
70 79						
An entrance hub is supplied.     1 to 3 holes: With HNA22 G3/4 for     22 mm conduit  4 holes: With HNA33 G1 for     28 mm conduit  Standard Type						

### **Dimensions**

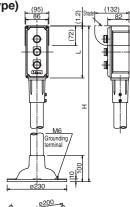
### • AGAW Control Station (Wall Mount)



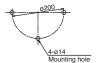
Type No.	Applicable Cable Diameter (R)
HNG21	8, 10, 12
HNAG22	13, 15, 17
HNAG33	18, 20, 22

	1 hole	2 holes	3 holes	4 holes		
L	150		200			
I	114		164			
Weight (Approx.)	0.6 kg		0.6 kg		g 0.7 kg	

• AGAW Control Station (Stand Type)



	1 hole	2 holes	3 holes	4 holes	
Н	1350		1400		
L	15	50	200		
Weight (Approx.)	6.1 kg		6.2 kg		

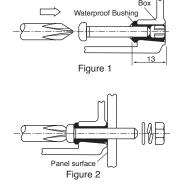


Accessory (Options)		Package Quantity: 1
Name & Shape	Type No.	Description & Dimensions
Enclsure Shade  95  132  Material: SPCC Thickness: 1 mm Weight: Approx. 0.25 kg	AGZ-S1Y	Protection for control units against direct sunlight and falling objects.     Color: Yellow (semi-gloss)     Shade mounting hole
Stand Pole	AGZ-S205	For replacement of the base and pole.     Color: Yellow (semi-gloss)  Stand gasket  Sealing base  Pole Outside Dia.: e48.6 Base  4-014 Hole  Grounding  Groundin
Weight: Approx. 5.6 kg		All dimensions in mm.

### Instructions

### • Precautions for Mounting on Panel (Wall)

- Insert M4 screws into the waterproof bushings at all four corners inside the box. Push the screws with a screwdriver and penetrate the bushings (Figure 1).
- Thrust the screws into panel holes and secure the screws with nuts (Figure 2). Waterproof characteristics are not affected by piecing the bushings with screws.



### **Ordering Information**

- When ordering control stations with control units: Specify the Ordering Type No. of the control station.
- When ordering enclosures without control units: Specify the following items.
- 1. Ordering Type No. of the enclosure
- 2. Ordering Type No. and specifications of the control units to be mounted (lens color, button color, etc.)
- 3. Nameplate
- 4. Lead-in fitting

Only when ordering the gland hub for leading in cables, specify the Ordering Type No. and the finished cable outside diameter (R).

5. Other specifications

### **Ordering Example**



Type No. of Enclosure		AGAW313Y
Control Unit and Nameplate	1	APW126R
	2	ABW210G, with NWA-1
and Namepiate	3	ABW201R, with NWA-2
Lead-in Fitting	4	HNAG22 R15

Note: Any ø22 mm TW series control units are selectable. Take into consideration the degree of protection of the control unit and the effective depth of the enclosure.

Flush Silhouette

Control

Display Lights

Display Units

Safety Products

Terminal Blocks

Comm. Terminals

AS-Interface

Relays & Timers

Sockets

Circuit Protectors

Power Supplies

> PLCs & SmartRelay

Operator Interfaces

Sensors

Stations

Protection

### IP65 Waterproof Aluminum Control Stations for ø30 mm Control Units

Various control stations are available from one to five holes with most widely used combinations of control units (contact configurations, voltage, button colors, and nameplates).

- Versatile combinations of control units are possible. Select from a wide variety of 30 mm (1-13/64 inch) dia. control units as required.
- In addition to standard depth enclosures, deep enclosures are also available for mounting illuminated pushbuttons which require a large depth behind the mounting surface. (See page 1295 for more details).



### **Specifications**

<u> </u>			
Degree of Protection (Note 1)	IP65 (IEC 60529, JEM1030) (Key selector switch: Splash-proof IP54)		
Material (Enclosure)	Aluminum		
Coating Color (Melamine coating)	Yellow semi-gloss (Munsell 5Y7/1, outside only)		
Rated Insulation Voltage	600V (Buzzer: 250V)		
Insulation Resistance	5 MΩ minimum		
Dielectric Strength (Note 2)	Between live and dead parts: 2500V AC, 1 minute		
Standard Operating Conditions (Note 3)	Ambient temperature: -25 to +50°C (no freezing) Relative humidity: 45 to 85% (no condensation)		
Enclosure Style	Wall mount (1 to 5 holes) Stand (1 to 5 holes)		
Cable Lead-in Hole (Wall Mount Type)	Entrance hub (Gland hub also available) 1 to 3 holes: HNA22 G3/4 (22 mm) 4 or 5 holes: HNA33 G1 (28 mm) (Standard control stations)		
Applicable Control Units	(Standard control stations)  IDEC ø30 mm series control units, AZ buzzer and AM ammeter (except enclosed type units)		

Note 1: The degree of protection depends on the control units mounted on the enclosure. When IP65 control units are mounted, the entire control station has IP65 characteristics. (See page 1280)

Note 2: AM ammeter/buzzer: 2000V AC, 1 minute

Note 3: Buzzer: -10 to +40°C

### Contact Ratings (Contact Block)

	Rated Insulation Voltage	600V
Contact Block	Rated Thermal Current	10A
Contact block	Contact Ratings by Utilization Category IEC60947-5-1	AC-15 (A600) DC-13 (P600)
	Catogory IECOCO II C I	Be 10 (1 000)

### • Operational Voltage and Current by Utilization Category

Op	erationa	l Voltage	24V	48V	50V	110V	220V	440V
t AC (50/		AC-12 Control of resistive loads and solid state loads	10A	_	10A	10A	6A	2A
nal Current	60Hz)	AC-15 Control of electromagnetic loads (>72VA)	10A	_	7A	5A	ЗА	1A
Operational OD	DC-12 Control of resistive loads and solid state loads	8A	4A	_	2.2A	1.1A	_	
Ľ		DC-13 Control of electromagnets	4A	2A	_	1.1A	0.6A	_

#### Common

Minimum applicable load (reference) = 3V AC/DC, 5mA (the applicable range is subject to change according to the operating conditions)

### • Control Unit Mounting Holes

The holes for mounting control units are 30.5 mm in diameter with an anti-rotation notch. Mounting centers are 50 mm.

### Waterproof Bushing

Four plastic bushings are provided inside the corners for mounting screws to secure the control station on a panel surface.

### • Lead-in Fittings (Wall Mount Type)

 An entrance hub made of aluminum is supplied for connecting a steel conduit to lead in cables.

1 to 3 holes: With HNA22 G3/4 for 22mm conduit 4 or 5 holes: With HNA33 G1 for 28mm conduit

HNAG type gland hubs for leading in cables are also available.

### • Stand Pole (Stand Type)

The pole is made of carbon steel (STK) pipe, and the stand base is made of iron. The coating color is the same as the enclosure, yellow (semi-gloss).



### **Control Stations with Control Units**

Control boxes are available with a selected combination of control units as listed below. For the dimensions and mounting centers, see the figures on pages 1295 and 1296.

### • Control Units Mounted on Standard Control Stations

Control Unit	Type No.	Specifications	
	ABN110 *	Flush, 1NO	
	ABN101 *	Flush, 1NC	
	ABN111 *	Flush, 1NO-1NC	
Pushbutton	ABN311R	ø40 mushroom, 1NO-1NC	
PB	ABBN1110 **	Flush, double beam latching, 1NO	
	ABBN1111 **	Flush, double beam latching, 1NO-1NC	
	ATN420	Toggle lever, 2NO	
	HN1E-BV411R	Emergency stop, 1NO-1NC	
Pilot Light	APN118 *	Dome, 110V AC (2W)	
(Incandescent)	APN128 *	Dome, 220V AC (2W)	
Selector Switch	ASN311	Knob, 2-position, 1NO-1NC	
Selector Switch	ASN111	Knob, 3-position, 1NO-1NC	
	ASN3K11	Key, 2-position, 1NO-1NC	
Buzzer	AZ11N	110V AC	
(SS)	AZ12N	220V AC	
Meter (A)	AM ammeter	Specify capacity (Type No.) Coating color of the meter bezel: N1.5	

Note: Specity a button or lens color code in place of  $\ast$ :

Pushbutton: B (black), G (green), R (red)

Pilot Light: G (green), R (red), W (white) Flush pushbuttons are supplied with black, green, and red color caps.

### Capacity and Type No. of AM Ammeters

	Capacity	Type No. (Ordering Type No.)	Remarks
	5A (nominal)	AM21B	
	10A (nominal)	AM22B	
	15A (nominal)	AM23B	
	30/5A (nominal)	AM24CB	Use a current
Ammeter	60/5A (nominal)	AM25CB	transformer on am-
Animeter	100/5A (nominal)	AM26CB	meters of 30A rating
	150/5A (nominal)	AM27CB	or more.
	200/5A (nominal)	AM28CB	
	300/5A (nominal)	AM29CB	
	/5A (nominal)	AM2CB *	

Note 1: When ordering, specify the Type No. Also specify a current value for the ammeter marked with

Note 2: The dial has a double-expanded scale. Also available are for tripleexpanded scales, 1A meters and other special ratings. Contact IDEC for details about other special specifications.

#### Type List Package Quantity: 1

Co	ntrol Station	Mounted Control Units		
Style	Type No. (Ordering Type No.)	Symbol	Type No.	NA Nameplate Legend
	AGA1101Y	PB	ABN110	ON
<u> </u>	AGA1102Y	PB	ABN311R	OFF
nt / 1 ho	AGA1103Y	PL	APN118R	Without nameplate
Wall Mount / 1 hole	AGA1104Y	PL	APN128R	Without nameplate
<b> </b>	AGA1105Y	SS	ASN311	HAND-AUTO
	AGA1106Y	<b>SS</b>	ASN111	HAND-OFF-AUTO

Control Station Mounted Control Units					
Style	Type No. (Ordering Type No.)	Symbol	Type No.	NA Nameplate	Flush Silhouette
	AGA1107Y *	SS	ASN3K11	Legend OFF-ON	Control Units
1 hole	AGA1108Y	(BZ)	AZ11N	Without nameplate	Display Lights
Wall Mount / 1 hole	AGA1109Y	(BZ)	AZ12N	Without nameplate	Display
Wall N	AGA1110Y	PB	ATN420	Without nameplate ON-OFF on bezel	Units
	AGA1111Y	PB	HN1E- BV411R	EMERGENCY STOP	Safety Products
hole	AGA1101SY	PB	ABN110	ON	Terminal Blocks
1 / pt	AGA1102SY	PB	ABN311R	OFF	Camana
Stand / 1 hole	AGA1111SY	PB	HN1E- BV411R	EMERGENCY STOP	Comm. Terminals
	AGA2101Y	(PB)	ABN110 ABN101	ON OFF	AS-Interface
	AGA2102Y	PB PB	ABN111 ABN111	ON OFF	Relays & Timers
	AGA2103Y	(P)	APN118R APN118G	Without nameplate	Sockets
	AGA2104Y	e e	APN128R APN128G	Without nameplate	Circuit Protectors
	AGA2105Y	P.B	APN118R ABN111	Without nameplate STOP	Power Supplies
	AGA2106Y	P P	APN128R ABN111	Without nameplate STOP	PLCs & SmartRelay
	AGA2107Y	(PL) (SS)	APN118R ASN311	Without nameplate HAND-AUTO	Operator Interfaces
holes	AGA2108Y	PL SS	APN128R ASN311	Without nameplate HAND-AUTO	Sensors
Wall Mount / 2 holes	AGA2110Y *	PL SS	APN128R ASN3K11	Without nameplate OFF-ON	Control Stations
Wall N	AGA2111Y	(PB) (PB)	ABBN1110	ON-OFF	Explosion Protection
	AGA2112Y	(PB) (PB)	ABBN1111	ON-OFF	References
	AGA2113Y	(PB)	ABN110 ABN311R	ON OFF	
	AGA2115Y	PL PB	APN128R ATN420	Without nameplate ON-OFF on bezel	
	AGA2116Y	BZ PB	AZ11N ABN111	Without nameplate	
	AGA2117Y	BZ PB	AZ12N ABN111	Without nameplate	
	AGA2118Y	®Z PL	AZ11N APN118R	Without nameplate	
	AGA2119Y	BZ PL	AZ12N APN128R	Without nameplate	
	•				•

Degree of protection marked with \* is splash-proof IP54.



Co	ontrol Station		Mounted Con	trol Units
Style	Type No. (Ordering Type No.)	Symbol	Type No.	NA Nameplate Legend
Stand / 2 holes	AGA2101SY	PB PB	ABN110 ABN101	ON OFF
Stand /	AGA2107SY	PL SS	APN118R ASN311	Without nameplate HAND-AUTO
	AGA3102Y	E B B	APN118R ABN110 ABN101	Without nameplate ON OFF
	AGA3103Y	<b>LBB</b>	APN128R ABN110 ABN101	Without nameplate ON OFF
les	AGA3104Y	(B) (B) (S)	ABN111 ABN111 ASN311	ON OFF HAND-AUTO
Wall Mount / 3 holes	AGA3105Y		APN118W APN118R APN118G	Without nameplate
Wa	AGA3106Y		APN128W APN128R APN128G	Without nameplate
	AGA3107Y		APN118R ABBN1110	Without nameplate ON OFF
	AGA3108Y	<b>LBB</b>	APN128R ABBN1110	Without nameplate ON OFF

Co	ontrol Station	ol Station Mounted Control Units				
Style	Type No. (Ordering Type No.)	Symbol	Type No.	NA Nameplate Legend		
Stand / 3 holes	AGA3102SY		APN118R ABN110 ABN101	Without nameplate ON OFF		
Stand /	AGA3104SY	<b>BB</b>	ABN111 ABN111 ASN311	ON OFF HAND-AUTO		
	Wall Mount AGA4101Y		APN128R APN128G	Without nameplate Without nameplate		
	Stand AGA4101SY	PB PB	ABN111 ABN111	ON OFF		
4 holes	Wall Mount AGAM4101Y	A	(Note) AM ammeter	Without nameplate		
Wall · Stand / 4 holes	Stand AGAM4101SY	(PB)	ABN111 ABN111	ON OFF		
Wall	Wall Mount AGA4102Y	P B	APN128R ABN111	Without nameplate ON		
	Stand AGA4102SY	(B) (S)	ABN111 ASN311	OFF HAND-AUTO		
	Wall Mount AGA5101Y		APN128R APN128G ABN111	Without nameplate Without nameplate ON		
d / 5 holes	Stand AGA5101SY	P B S	ABN111 ASN311	OFF HAND-AUTO		
Wall · Stand / 5 holes	Wall Mount AGAM5101Y	A	(Note) AM ammeter	Without nameplate		
	Stand AGAM5101SY		APN128R ABN111 ABN111	Without nameplate ON OFF		

Note: Specify the Type No. of the meter to select a required capacity.

### **Empty Enclosures**

Package Quantity: 1

Flush

Control

Display Lights

Display Units

Safety

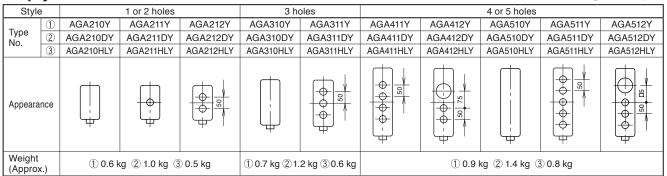
Blocks

Terminals

AS-Interface

Sockets

Products



①: Standard depth enclosure with an entrance hub

1 to 3 holes: With HNA22 G3/4 entrance hub for 22 mm conduit

4 or 5 holes: With HNA33 G1 entrance hub for 28 mm conduit

2: Deep enclosure with an entrance hub

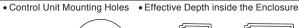
1 or 2 holes: With HNA22 G3/4 entrance hub for 22 mm conduit

3 to 5 holes: With HNA33 G1 entrance hub for 28 mm conduit

③: Standard depth enclosure without an entrance hub

1 to 3 holes: With a threaded hole G3/4 (22 mm) at the bottom

4 or 5 holes: With a threaded hole G1 (28 mm) at the bottom









enclosure

79

Deep enclosure Relavs &

In addition to the enclosures shown above, enclosures with a shade and stand type enclosures are also available. See the list below and page 1296.

### • Other Types (For 1, 2 or 3 holes)

Package Quantity: 1

Style		Hub	Shade	Stand		1 or 2 holes		3	holes	Circuit
		Х	Х		AGA210KY	AGA211KY	AGA212KY	AGA310KY	AGA311KY	Protec
	Standard			Х	AGA210SY	AGA211SY	AGA212SY	AGA310SY	AGA311SY	
Type No.	depth enclosure		Х	Х	AGA210KSY	AGA211KSY	AGA212KSY	AGA310KSY	AGA311KSY	Power
(Ordering	Cholosarc		Х		AGA210KHLY	AGA211KHLY	AGA212KHLY	AGA310KHLY	AGA311KHLY	Suppli
Type No.)	D	Х	Х		AGA210DKY	AGA211DKY	AGA212DKY	AGA310DKY	AGA311DKY	
	Deep enclosure			Х	AGA210DSY	AGA211DSY	AGA212DSY	AGA310DSY	AGA311DSY	PLCs
	enclosure		Х	Х	AGA210DKSY	AGA211DKSY	AGA212DKSY	AGA310DKSY	AGA311DKSY	SmartF
Appearanc	ce									Opera Interfa Senso
		With a s	hade		0.85 kg	0.85 kg	0.85 kg	0.95 kg	0.95 kg	Contro Statio
	Standard	Stand ty	ре		6.1 kg	6.1 kg	6.1 kg	6.2 kg	6.2 kg	
	depth enclosure	Stand ty	pe with a s	hade	6.4 kg	6.4 kg	6.4 kg	6.5 kg	6.5 kg	Explo
Weight	01101000110	With a s	hade (witho	ut a hub)	0.75 kg	0.75 kg	0.75 kg	0.85 kg	0.85 kg	Prote
(Approx.)	B	With a s	hade		1.25 kg	1.25 kg	1.25 kg	1.45 kg	1.45 kg	
	Deep enclosure	Stand ty	ре		6.75 kg	6.75 kg	6.75 kg	6.95 kg	6.95 kg	
	enclosure	Stand ty	pe with a s	hade	7.0 kg	7.0 kg	7.0 kg	7.1 kg	7.1 kg	Refere

### • Other Types (For 4 or 5 holes)

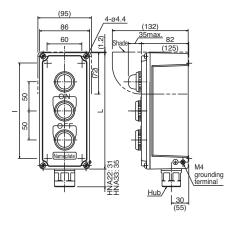
Package (	Quantity	:	٠
-----------	----------	---	---

Style		4 or 5 holes							
Style		Hub	Shade	Stand					
		Χ	X		AGA411KY	AGA412KY	AGA510KY	AGA511KY	AGA512KY
	Standard			Х	AGA411SY	AGA412SY	AGA510SY	AGA511SY	AGA512SY
Type No.	depth enclosure		Х	Х	AGA411KSY	AGA412KSY	AGA510KSY	AGA511KSY	AGA512KSY
(Ordering	Cholodaro		Х		AGA411KHLY	AGA412KHLY	AGA510KHLY	AGA511KHLY	AGA512KHLY
Type No.)		Х	Х		AGA411DKY	AGA412DKY	AGA510DKY	AGA511DKY	AGA512DKY
	Deep enclosure			Х	AGA411DSY	_	AGA510DSY	AGA511DSY	AGA512DSY
	enclosure		Х	Х	AGA411DKSY	_	AGA510DKSY	AGA511DKSY	AGA512DKSY
Appearance			- H			(S)			
	Standard	With a shade		1.15 kg	1.15 kg	1.15 kg	1.15 kg	1.15 kg	
	depth	Stand typ	ре		6.4 kg	6.4 kg	6.4 kg	6.4 kg	6.4 kg
Weight	enclosure	Stand typ	e with a sh	ade	6.65 kg	6.65 kg	6.65 kg	6.65 kg	6.65 kg
(Approx.)		With a sh	ade (witho	ut a hub)	1.05 kg	1.05 kg	1.05 kg	1.05 kg	1.05 kg
(, (pp10x.)	Doon	With a sh	ade		1.65 kg	1.65 kg	1.65 kg	1.65 kg	1.65 kg
	Deep enclosure	Stand typ	е		6.9 kg	_	6.9 kg	6.9 kg	6.9 kg
	Citologuie	Stand typ	e with a sh	ade	7.15 kg	_	7.15 kg	7.15 kg	7.15 kg

<sup>•</sup> For details about enclosures without control units, see page 1295.

### **Dimensions**

### • AGA Control Station (Wall Mount)



Dimensions in ( ) for a control box with a shade.

	1 hole	2 holes	3 holes	4 holes	5 holes
L	15	50	200	300	
l 114		14	164	264	
Weight (Approx.)	0.6	kg	0.7 kg	0.9 kg	

• Entrance Hub (Supplied)
(Standard depth enclosures)
1 to 3 holes: With HNA22 G3/4 for 22 mm conduit

4 or 5 holes: With HNA33 G1 for 28 mm conduit

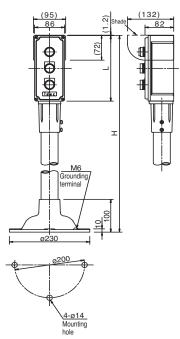
(Deep enclosures with an entrance hub)
1 or 2 holes: With HNA22 G3/4 for 22 mm conduit

3 to 5 holes: With HNA33 G1 for 28 mm conduit

### • Gland hubs for leading in cables are also available.

Type No.	Applicable Cable Diameter (R)		
HNG21	8, 10, 12		
HNAG22	13, 15, 17		
HNAG33	18, 20, 22		

### • AGA Control Station (Stand Type)

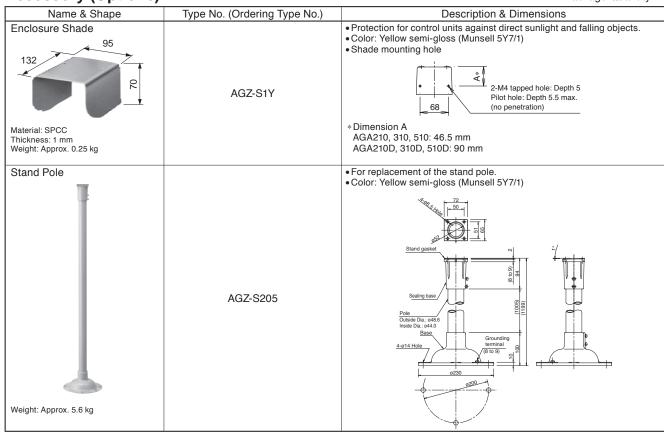


Dimensions in ( ) for a control box with a shade.

	1 hole	2 holes	3 holes	4 holes	5 holes	
Н	13	50	1400	1500		
L	15	50	200	300		
Weight (Approx.)	6.1 kg		6.2 kg	6.4 kg		

### **Accessory (Options)**

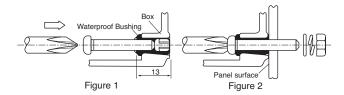
Package Quantity: 1



### Instructions

### • Precautions for Mounting on Panel (Wall)

- Insert M4 screws into the waterproof bushings at all four corners inside the box. Push the screws with a screwdriver and penetrate the bushings (Figure 1).
- Thrust the screws into panel holes and secure the screws with nuts (Figure 2). Waterproof characteristics are not affected by piecing the bushings with screws.



### **Ordering Information**

• When ordering control stations with control units: Specify the Ordering Type No. of the control station.

### • When ordering enclosures without control units: Specify the following items.

- 1. Ordering Type No. of the enclosure
- Ordering Type No. and specifications of the control units to be mounted (lens color, button color, etc.)
- 3. Nameplate
- Lead-in fitting
   Only when ordering the gland hub for lead in cables, specify
   the Ordering Type No. and the cable outside diameter (R).

5. Other specifications

### Ordering Example



Type No. of Enclo	osure	AGA311Y
Oambual I Imit	1	APN128R
Control Unit and Nameplate	2	ABN210B, with NA-1
and Namepiate	3	ABN201R, with NA-2
Lead-in Fitting	4	HNAG22 R15

Note: Any ø30 mm series control units are selectable. Take into consideration the degree of protection of the control unit and the effective depth of the enclosure.

Flush Silhouette

Control

Display Lights

Display Units

Safety Products

Terminal Blocks

Terminals

AS-Interface

Relays & Timers

Sockets

Circuit Protectors

Power Supplies

PLCs &

SmartRelay
Operator
Interfaces

Sensors

Control Stations

Explosion Protection

### IP65 Waterproof Multiple Column Aluminum Control Stations Versatile Combinations of Control Units

The AGA multiple column control stations are designed for mounting various types of control units in various combinations. Standard control stations are available with predetermined specifications of cable lead-in holes and the control units to be mounted (contact configurations, voltage, button colors, and nameplates).

- Versatile combinations of control units are possible. Select from a wide variety of 30 mm (1-13/64 inch) dia. control units
- The lid of the enclosure is hinged to make wiring and maintenance easy.



Туре	AGA480 • 580	AGA680 • 690		
Degree of Protection (Note 1)	IP65 (IEC 60529, JEM1030)			
Material (Enclosure)	Aluminum			
Coating Color (Melamine coating)	Yellow semi-gloss (Munsell 5Y7/1, outside only)			
Rated Insulation Voltage	600V (Buzzer: 250V)			
Insulation Resistance	5 MΩ minimum			
Dielectric Strength (Note 2)	Between live and dead parts: 2500V AC, 1 minute			
Standard Operating Conditions (Note 3)	Ambient temperature: -25 to +50°C (no freezing) Relative humidity: 45 to 85% (no condensation)			
Enclosure Style	Wall mount/Stand Types (4 × 2 or 5 × 2 holes)	Wall mount/Stand Types (6 × 2 or 6 × 3 holes)		
Cable Lead-in (Wall Mount Type)	Entrance hub (Gland hub also available) HNA33 G1 (28 mm)			
Applicable Control Units	IDEC ø30 mm series control units, AZ buzzer and AM ammeter (except enclosed type units)			

Note 1: The degree of protection depends on the control units mounted on the enclosure. When IP65 control units are mounted, the entire control station has IP65 characteristics. (See page 1280)

Note 2: AM ammeter/buzzer: 2000V AC, 1 minute

Note 3: Buzzer: -10 to +40°C

### **Contact Ratings (Contact Block)**

	• •	,
	Rated Insulation Voltage	600V
Contact block	Rated Thermal Current	10A
	Contact Ratings by Utilization	AC-15 (A600)
	Category IEC60947-5-1	DC-13 (P600)

• Operational Voltage and Current by Utilization Category

								<u> </u>
Operational Voltage			24V	48V	50V	110V	220V	440V
urrent (50/60Hz)		AC-12 Control of resistive loads and solid state loads	10A	_	10A	10A	6A	2A
al Cur	AC (5	AC-15 Control of electro- magnetic loads (>72VA)	10A	_	7A	5A	ЗА	1A
Operational Current	DC	DC-12 Control of resistive loads and solid state loads	10A	5A	-	2.2A	1.1A	-
Q d	DC-13 Control of electro- magnets	5A	2A	-	1.1A	0.6A	-	

#### • Common

Minimum applicable load (reference) = 3V AC/DC, 5mA (the applicable range is subject to change according to the operating conditions)



### Control Unit Mounting Holes

The holes for mounting control units are 30.5 mm in diameter with an anti-rotation notch. Mounting centers are 50 mm.

### • Lead-in Fittings (Wall Mount Type)

An entrance hub made of aluminum is supplied for connecting a steel conduit to lead in cables.

AGA480 (4  $\times$  2 holes), AGA580 (5  $\times$  2 holes):

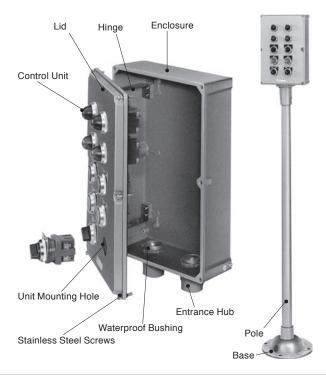
With two HNA33 G1 for 28 mm conduit

(Available with one HNA33, upon request)

AGA680 (6  $\times$  2 holes): With two HNA33 G1 for 28 mm conduit AGA690 (6  $\times$  3 holes): With three HNA33 G1 for 28 mm conduit Gland hubs for lead in cables are also available.

### Stand Pole (Stand Type)

The pole is made of carbon steel (STK) pipe, and the base is made of iron. The coating color is the same as the enclosure, yellow (semi-gloss).



### **Control Stations with Control Units**

Control stations are available with selected combination of control units as listed below. For the dimensions and mounting centers, see the figures on pages 1299 and 1300.

### • Control Units Mounted in Control Stations

Control Unit	Type No.	Specifications
Pushbutton	ABN111 *	Flush, 1NO-1NC
Pilot Light (Incandescent)	APN128 *	Dome, 220V AC (2W)
Selector Switch	ASN311	Knob, 2-position, 1NO-1NC
Meter (A)	AM ammeter (See page 1493)	Specify capacity (Type No.) Coating color of the meter bezel: N1.5

Note: Specify a button or lens color code in place of  $\ast$ : Pushbutton: B (black), G (green), R (red) Pilot Light: G (green), R (red), W (white)

Flush pushbuttons are supplied with black, green, and red color caps.

### **Type List**

### • AGA480 Control Box (Wall mount/Stand Type)

Package Quantity: 1

		Maria de Arcada				
	Control Box	Mounted Control Units				
Style	Type No. (Ordering Type No.)	Symbol	Type No.	NA Nameplate Legend		
	Wall Mount AGA4801Y	PLPL PLPL	APN128R APN128G	Without nameplate Without nameplate		
holes	Stand AGA4801SY	PB PB	ABN111 ABN111	ON OFF		
4 × 2 holes	Wall Mount AGAM4801Y	AA	(Note) AM ammeter	Without nameplate		
	Stand AGAM4801SY	PB PB	ABN111 ABN111	ON OFF		

Note: Specify the Type No. of the meter to select a required capacity.

### AGA580/AGA690 Control Box (Wall mount/Stand Type)

Package Quantity: 1

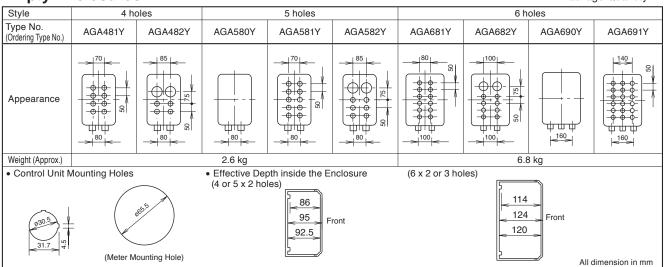
Flush

(Wal	II mount/Star	id Type)	Pa	Flush Silhouette	
Control Box			Mounted Cont	rol Units	Omiodette
Style	Type No. (Ordering Type No.)	Symbol	Type No.	NA Nameplate Legend	Control Units
Wall Mount AGA5801Y		P.P. P.P. PBPB	APN128R APN128G ABN111	Without nameplate Without nameplate ON	Display Lights
$5 \times 2$ holes	Stand AGA5801SY	(PB(PB) (SS(SS)	ABN111 ASN311	OFF HAND-AUTO	Display Units
5 × 2	Wall Mount AGAM5801Y	AA PLPL	(Note) AM ammeter	Without nameplate	Safety
	Stand AGAM5801SY	(B)	APN128R ABN111 ABN111	Without nameplate ON OFF	Products  Terminal
					Blocks
	Wall Mount AGA6801Y	(PL)(PL) (PB)(PB) (PL)(PL)	APN128R ABN111 ABN111 APN128R	Without nameplate ON OFF Without nameplate	Comm. Terminals
Stand AGA6801SY 2 0 0 Wall Mount		PB/PB PB/PB	ABN111 ABN111	ON OFF	AS-Interface
6 × 2	Wall Mount AGAM6801Y	(A) (PL)(PL)	(Note) AM ammeter	Without nameplate	Relays & Timers
Stand AGAM6801SY		(P)	APN128R APN128G ABN111 ABN111	Without nameplate Without nameplate ON OFF	Sockets
			ADIVITI	011	Circuit
	Wall Mount	(PL)(PL)(PL)	APN128R	Without nameplate	Protectors
	AGA6901Y	(B)	ABN111 ABN111 ABN111 APN128R	ON OFF Without nameplate	Power Supplies
6 × 3 holes	Stand AGA6901SY	®®® ®®®	ABN111 ABN111	ON OFF	PLCs & SmartRelay
6 × 3	Wall Mount AGAM6901Y	AAA PPPP	(Note) AM ammeter	Without nameplate	Operator Interfaces
	Stand AGAM6901SY	PPP PBPB PBPB	APN128R APN128G ABN111 ABN111	Without nameplate Without nameplate ON OFF	Sensors
	1	L			

Protection

References

**Empty Enclosures** Package Quantity: 1



Note: Entrance hubs HNA33YG G1 for 28mm conduit are supplied as standard. The quantity is as shown in the figure above.

• In addition to the enclosures shown above, enclosures with a shade and stand type enclosures are also available. See page 1300 for more details.

<sup>•</sup> Control stations with a shade are available. See page 1300 for more

Other Types Package Quantity: 1

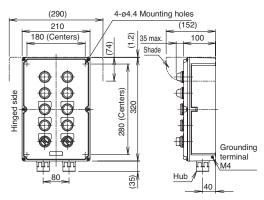
Style	Control Units	Hubs	Shade	Stand			4 or 5 × 2 holes		
	Х	Х	Х		AGA4801KY	AGAM4801KY	_	AGA5801KY	AGAM5801KY
Type No.	X		Х	Х	AGA4801KSY	AGAM4801KSY	-	AGA5801KSY	AGAM5801KSY
(Ordering		Х	Х		AGA481KY	AGA482KY	AGA580KY	AGA581KY	AGA582KY
Type No.)				Х	AGA481SY	AGA482SY	AGA580SY	AGA581SY	AGA582SY
			Х	Х	AGA481KSY	AGA482KSY	AGA580KSY	AGA581KSY	AGA582KSY
Appearance	ì		70 0 0 0 0 0 0 0	85 95 95 95 95 95 95 95 95 95 9	-> 80	70 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	85 95 96 96 97 98 98		
	With control un	its and a	shade		5.0 kg	6.7 kg	-	5.3 kg	7.0 kg
Moight	With control uni	ts, stand t	ype with a	shade	10.6 kg	12.3 kg	-	10.6 kg	12.3 kg
Weight (Approx.)	With a shade				3.1 kg	3.1 kg	3.1 kg	3.1 kg	3.1 kg
(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Stand type				8.0 kg	8.0 kg	8.0 kg	8.0 kg	8.0 kg
	Stand type with	n a shade			8.4 kg	8.4 kg	8.4 kg	8.4 kg	8.4 kg

Style							6 × 2 or 3 holes		
Otyle	Control Units	Hubs	Shade	Stand			0 × 2 01 3 110163		
	X	Χ	X		AGA6801KY	AGAM6801KY	_	AGA6901KY	AGAM6901KY
Type No.	X		X	Х	AGA6801KSY	AGAM6801KSY	-	AGA6901KSY	AGAM6901KSY
(Ordering		Х	Х		AGA681KY	AGA682KY	AGA690KY	AGA691KY	-
Type No.)				Х	AGA681SY	AGA682SY	AGA690SY	AGA691SY	-
			Х	Х	AGA681KSY	AGA682KSY	AGA690KSY	AGA691KSY	-
Appearance	nce		80	100	160	140			
	With control un	its and a	shade		11.3 kg	13.0 kg	-	11.3 kg	13.8 kg
\\/-:-b+	With control uni	ts,stand ty	pe with a s	hade	17.5 kg	19.2 kg	1	17.5 kg	20.0 kg
Weight (Approx.)	With a shade				7.6 kg	7.6 kg	7.6 kg	7.6 kg	_
(, (ppi ox.)	Stand type				13.0 kg	13.0 kg	13.0 kg	13.0 kg	-
	Stand type with	n a shade			13.7 kg	13.7 kg	13.7 kg	13.7 kg	_

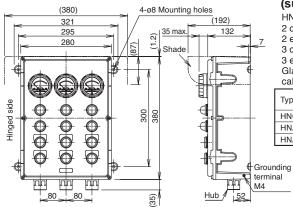
<sup>For more details about enclosures without control units, see page 1299.
For more detail about control units mounted on control stations, see page 1299.</sup> 

### **Dimensions**

### • AGA480/AGA580 (Wall Mount Type)



### • AGA680/AGA690 (Wall Mount Type)



### Entrance Hub (supplied)

HNA33 G1 for 28 mm conduit 2 column type: 2 entrance hubs attached

3 column type:

3 entrance hubs attached Gland hubs for leading in cables are also available.

Type No.	Applicable Cable Diameter (R)
HNG31	8, 10, 12
HNAG32	13, 15, 17
11114000	10 00 00

HNAG33 18, 20, 22

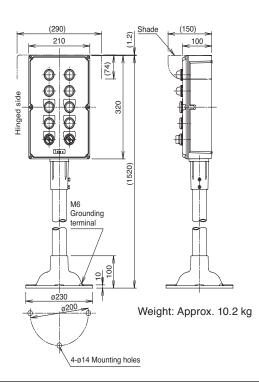
Comm.

Terminals

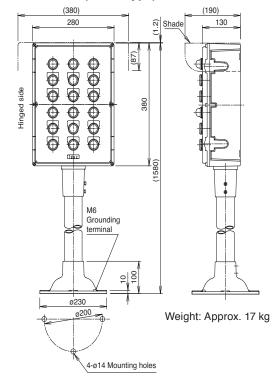
Weight: Approx. 10.5 kg

### AGA480/AGA580 (Stand Type)

Weight: Approx. 4.8 kg

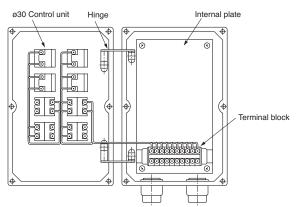


### AGA680/AGA690 (Stand Type)

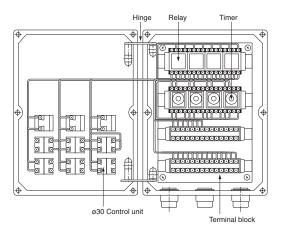


### **Application Examples of Control Stations**

### • AGA580 Control Station



### AGA690 Control Station



Silhouette Control

Display Lights

Display Units

Safety Products

Terminal Blocks

AS-Interface

Relays & Timers

Sockets

Circuit Protectors

Supplies

PLCs & SmartRelay

Operator Interfaces

Sensors

Protection

### **Accessory (Options)**

Package Quantity: 1

Accessory (Options)		Package Quantity: 1		
Name & Shape	Type No. (Ordering Type No.)	Description & Dimensions		
Enclosure Shade	, , , , , , , , , , , , , , , , , , ,	Used on AGA480/AGA580 enclosures as a protection for the control units against direct sunlight and falling objects.     Color: 5Y7/1 (semi-gloss)     Shade mounting hole		
For AGA480/AGA580 Material: SPCC Thickness: 1 mm Weight: Approx. 0.46 kg	AGZ-S2Y	2-M4 Tapped hole: Depth 5 Pilot hole: Depth 5.5 max. (no penetration)		
For AGA680/AGA690 Material: SPCC Thickness: 1 mm Weight: Approx. 0.72 kg	AGZ-S3Y	Used on AGA680/AGA690 control boxes as a protection for the control units against direct sunlight and falling objects.     Color: 5Y7/1 (semi-gloss)     Shade mounting hole  2-M4 Tapped hole: Depth 5 Pliot hole: Depth 5 Pliot hole: Depth 5.5 max. (no penetration)		
Internal Plate	AGZ-P2 (For AGA480/AGA580)	Used to mount terminal blocks, relays, timers, and other units		
Dimensions in ( ) for AGA690 control box  Material: SPCC (Zinc-plated) Thickness: 2.3 mm  Weight: AGZ-P2: Approx. 0.59 kg AGZ-P3: Approx. 1.05 kg	AGZ-P3 (For AGA680/AGA690)	for internal wiring.		
Stand Pole  Weight: Approx. 5.6 kg	AGZ-S205 (For AGA480/AGA580)	For maintenance of the stand part.     Color: 5Y7/1 (semi-gloss)  AGZ-S205  Stand gasket  Pob Sealing base  Grounding Bas		
Stand Pole  Weight: Approx. 6.5 kg	AGZ-S206 (For AGA680/AGA690)	AGZ-S206  Saling base  Pole Duside Dia: :65.5 9 Inside Dia: :65.5 9 Inside Dia: :65.9		

### Instructions

### Precautions for Mounting AGA480/AGA580 Control Stations on Panel

- 1. Insert M4 screws into the waterproof bushings at all four corners inside the box. Push the screws with a screw-driver and penetrate the bushings (Figure 1).
- 2. Thrust the screws into panel holes and secure the screws with nuts (Figure 2).

Waterproof characteristics are not affected by piecing the bushings with screws.

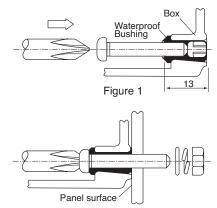


Figure 2

### **Ordering Information**

 When ordering control stations with control units (standard):

Specify the Ordering Type No. of the control station.

- When ordering enclosures without control units: Specify the following items.
- 1. Ordering Type No. of the enclosure
- 2. Ordering Type No. and specifications of the control units to be mounted (lens color, button color, etc.)
- 3. Nameplate
- Lead-in fitting
   Only when ordering the gland hub for leading in cables, specify the Ordering Type No. and the cable outside diameter. (R).
- 5. Other specifications

### **Ordering Example**

_				
(1) (2)		Type No. of Encl	osure	AGA581Y
3 4			12	APN128R
56		0	3(4)	APN128G
78		Control Unit and Nameplate	56	ABN210B, with NA-1
9 10			78	ABN201R, with NA-2
		910	ASN311, with NA-32	
		Lead-in Fitting	1	HNAG33 R18

Note: Any ø30 mm series control units are selectable. Take into consideration the degree of protection of the control unit and the effective depth of the enclosure.

Flush Silhouette

Control

Display Lights

Display Units

Safety Products

Terminal Blocks

Comm. Terminals

AS-Interface

Relays & Timers

Sockets

Circuit Protectors

Supplies
PLCs &
SmartRelay

Operator Interfaces

Sensors

Control

Explosion Protection

## AGS Series Control Stations

## **IP65** Waterproof Stainless Steel Control Stations

### **High Corrosion and Weather Resistant**

The AGS series control stations are designed for mounting various types of control units in various combinations. Standard control stations are available with predetermined specifications of cable lead-in holes and control units mounted (contact configurations, voltage, button colors, and nameplates).

- Wide variety of combinations of control units are possible.
   Select from a wide variety of ø30 series control units.
- Buff finish available upon request.



### **Specifications**

Degree of Protection (Note 1)	IP65 (IEC 60529, JEM1030) Key selector switch: Splash-proof IP54
Material (Box)	SUS304 (thickness 1 mm)
Coating Color (Melamine coating)	Yellow semi-gloss (Munsell 5Y7/1) 1 column type: Outside only 2 or 3 column type: Both inside and outside
Rated Insulation Voltage	600V
Insulation Resistance	5 MΩ minimum (500V DC megger)
Dielectric Strength (Note 2)	Between live and dead parts: 2500V AC, 1 minute
Standard Operating Conditions	Ambient temperature: -25 to +50°C (no freezing) Relative humidity: 45 to 85% (no condensation)
Enclosure Style	1 to 5 holes × 1 column, 3 to 5 holes × 2 or 3 columns Wall mount/Stand Types
Cable Lead-in (Wall Mount Type)	Reducer bushing (Gland hub also available) G1 (28 mm) 1 to 3 holes × 1 column: G3/4 (22 mm)
Applicable Control Units	IDEC ø30 mm series control units, AM ammeter (except enclosed type units)

Note 1: Degree of protection depends on the control units mounted on the enclosure. When IP65 control units are mounted, the entire control station has IP65 characteristics. (See page 1280)

Note 2: AM ammeter: 2000V AC, 1 minute

#### • Control Unit Mounting Holes

The holes for mounting control units are 30.5 mm in diameter with an anti-rotation notch. Mounting centers are 50 mm.

### • Lead-in Fittings (Wall Mount Type)

A reducer bushing made of brass is supplied for connecting a steel conduit to lead in cables.

1 column  $\times$  1 to 3 holes: With one G3/4 for 22 mm conduit 1 column  $\times$  4 or 5 holes: With one G1 for 28 mm conduit 2 columns  $\times$  2 or 3 holes: With two G3/4 for 22 mm conduit 2 columns  $\times$  4 or 5 holes: With two G1 for 28 mm conduit 3 columns  $\times$  2 or 3 holes: With three G3/4 for 22 mm conduit 3 columns  $\times$  4 or 5 holes: With three G1 for 28 mm conduit

Note: Mounting other than standard (e.g. one bushing for 2 column type, one or two bushings for 3 column type) Is not available. In this case, a plug is supplied.

HNG type gland hubs for lead in cables are also available.

### Stand Pole (Stand Type)

The pole is made of carbon steel (STK) pipe, and the base is made of cast iron. The coating color is the same as the enclosure, yellow (semi-gloss).



### **Control Stations with Control Units**

The standard control stations are available with selected combinations of control units as listed below. For the dimensions and mounting centers, see the figures on page 1307.

### • Control Units Mounted on Standard Control Stations

Control Unit	Type No.	Specifications	
	ABN110 *	Flush, 1NO	
	ABN101 *	Flush, 1NC	
Pushbutton	ABN111 *	Flush, 1NO-1NC	
(PB)	ABN311R	ø40 mushroom, 1NO-1NC	
	ATN420	Toggle lever, 2NO	
	HN1E-BV411R	Emergency stop, 1NO-1NC	
Pilot Light	APN118 *	Dome, 110V AC (2W)	
(Incandescent)	APN128 *	Dome, 220V AC (2W)	
0.1	ASN311	Knob, 2-position, 1NO-1NC	
Selector Switch	ASN111	Knob, 3-position, 1NO-1NC	
	ASN3K11	Key, 2-position, 1NO-1NC	
Meter (A)	AM ammeter (See page 1923)	Specify capacity (Type No.) Coating color of the meter bezel: N1.5 (polish)	

Note: Specify a button or lens color code in place of \*: Pushbutton: B (black), G (green), R (red) Pilot Light: G (green), R (red), W (white)

Flush pushbuttons are supplied with black, green, and red color caps.

### Type List

• 1-column Type

Package Quantity: 1

1-col	umn Type		Package Quantity: 1		
Co	Control Station		Mounted Cor	ntrol Units	
Style	Type No. (Ordering Type No.)	Symbol	Type No.	NA Nameplate Legend	
	AGS1101M	PB	ABN110	ON	
	AGS1102M	®	ABN311R	OFF	
ole	AGS1103M	(PL)	APN118R	Without nameplate	
nt / 1 h	AGS1105M	<b>SS</b>	ASN311	HAND-AUTO	
Wall Mount / 1 hole	AGS1106M	(\$8)	ASN111	HAND-OFF-AUTO	
Wa	AGS1107M *	SS	ASN3K11	OFF-ON	
	AGS1108M	PB	ATN420	Without nameplate ON-OFF on bezel	
	AGS1111M	PB	HN1E- BV411R	EMERGENCY STOP	
Jole	AGS1101SM	PB	ABN110	ON	
Stand / 1 hole	AGS1102SM	PB	ABN311R	OFF	
Star	AGS1111SM	PB	HN1E- BV411R	EMERGENCY STOP	
	AGS2101M	PB PB	ABN110 ABN101	ON OFF	
Wall Mount / 2 holes	AGS2102M	PB	ABN111 ABN111	ON OFF	
	AGS2103M	(PL)	APN118R APN118G	Without nameplate	
-	AGS2104M	(P)	APN128R APN128G	Without nameplate	

Degree of protection marked with \* is splash-proof IP54.

					1
Co	Control Station		Mounted Co		Flush
Style	Type No. (Ordering Type No.)	Symbol	Type No.	NA Nameplate Legend	Silhouette
	AGS2105M	PL PB	APN118R ABN111	Without nameplate STOP	Control Units
	AGS2106M	PL PB	APN128R ABN111	Without nameplate STOP	Display Lights
holes	AGS2107M	PL SS	APN118R ASN311	Without nameplate HAND-AUTO	Display Units
Wall Mount / 2 holes	AGS2108M	PL SS	APN128R ASN311	Without nameplate HAND-AUTO	Safety Products
Wall N	AGS2110M *	PL SS	APN128R ASN3K11	Without nameplate OFF-ON	Terminal Blocks
	AGS2113M	(PB) (PB)	ABN110 ABN311R	ON OFF	Comm. Terminals
	AGS2115M	PL PB	APN128R ATN420	Without nameplate ON-OFF on bezel	AS-Interface
Stand / 2 holes	AGS2101SM	(PB) (PB)	ABN110 ABN101	ON OFF	Relays & Timers
Stand /	AGS2107SM	PL SS	APN118R ASN311	Without nameplate HAND-AUTO	Sockets
	AGS3102M		APN118R ABN110 ABN101	Without nameplate ON OFF	Circuit Protectors
S	AGS3103M	PL PB PB	APN128R ABN110 ABN101	Without nameplate ON OFF	Power Supplies
hole					PLCs & SmartRelay
Wall Mount / 3 holes	AGS3104M	(PB) (PB) (SS)	ABN111 ABN111 ASN311	ON OFF HAND-AUTO	Operator Interfaces
Wall	AGS3105M		APN118W APN118R APN118G	Without nameplate	Sensors
	AGS3106M		APN128W APN128R APN128G	Without nameplate	Control Stations
səlc	AGS3102SM	PL PB	APN118R ABN110	Without nameplate ON	- Explosion Protection
/ 3 h		®	ABN101	OFF	References
Stand / 3 holes	AGS3104SM	PB PB SS	ABN111 ABN111 ASN311	ON OFF HAND-AUTO	

Degree of protection marked with \* is splash-proof IP54.

### **AGS** Series Control Stations

Co	ontrol Station		Mounted Control Units				
Style	Type No. (Ordering Type No.)	Symbol	Type No.	NA Nameplate Legend			
	Wall Mount AGS4101	P. P.	APN128R APN128G	Without nameplate Without nameplate			
	Stand AGS4101S	(PB) (PB)	ABN111 ABN111	ON OFF			
/ 4 holes	Wall Mount AGSM4101	(A)	(Note ) AM ammeter	Without nameplate			
Wall • Stand / 4 holes	Stand AGSM4101S	(PB)	ABN111 ABN111	ON OFF			
Wal	Wall Mount AGS4102	PL PB	APN128R ABN111	Without nameplate ON			
	Stand AGS4102S	(PB) (SS)	ABN111 ASN311	OFF HAND-AUTO			
	Wall Mount AGS5101		APN128R APN128G ABN111	Without nameplate Without nameplate ON			
Wall • Stand / 5 holes	Stand AGS5101S	(B) (S)	ABN111 ASN311	OFF HAND-AUTO			
Wall • Stan	Wall Mount AGSM5101	A	(Note) AM ammeter	Without nameplate Without nameplate			
	Stand AGSM5101S		ABN111 ABN111	ON OFF			

Note: Specify the Type No. of the meter to select a required capacity.

• 2-column Type	Package Quantity:

	Control Station Mounted Control Units							
Co	ntrol Station		Mounted Cont					
Style	Type No. (Ordering Type No.)	Symbol	Type No.	NA Nameplate Legend				
səlou	Wall Mount AGS3801	PB PB	ABN111 ABN111	ON OFF				
d/31	Stand AGS3801S	<u>(SS)(SS)</u>	ASN311	HAND-AUTO				
Wall • Stand / 3 holes	Wall Mount AGS3802	PLPL (PB)PB	APN128R ABN111	Without nameplate ON				
Wall	Stand AGS3802S	BB	ABN111	OFF				
Wall • Stand / 4 holes	Wall Mount AGS4801	(P)(P)	APN128R APN128G	Without nameplate Without nameplate				
Wall •	Stand AGS4801S	(B)(B)	ABN111 ABN111	ON OFF				
σ	Wall Mount AGS5801	PLPL PLPL PBPB	APN128R APN128G ABN111	Without nameplate Without nameplate ON				
Wall • Stand / 5 holes	Stand AGS5801S	(PB)(PB) (SS)(SS)	ABN111 ASN311	OFF HAND-AUTO				
Wall • Star	Wall Mount AGSM5801	<b>AA</b> <b>PP</b> <b>BB</b> <b>BB</b>	(Note) AM ammeter APN128R ABN111 ABN111	Without nameplate Without nameplate ON OFF				

Note: Specify the Type No. of the meter to select a required capacity.

•	3-co	lumn Type		Package Quantity: 1				
	Co	ntrol Station		Mounted Cont	rol Units			
	Style	Type No. (Ordering Type No.)	Symbol	Type No.	NA Nameplate Legend			
	səlou	Wall Mount AGS3901	(B)	ABN111 ABN111	ON OFF			
	Wall • Stand / 3 holes	Stand AGS3901S	8888	ASN311	HAND-AUTO			
	• Star	Wall Mount AGS3902	PLPLPL PB/PB/PB	APN128R ABN111	Without nameplate ON			
	Wall	Stand AGS3902S	BBB	ABN111	OFF			
	Wall • Stand / 4 holes	Wall Mount AGS4901	(P)(P)(P)(P)(P)(P)(P)(P)(P)(P)(P)(P)(P)(	APN128R APN128G	Without nameplate Without nameplate			
	Wall •	Stand AGS4901S	(B)	ABN111 ABN111	ON OFF			
		Wall Mount AGS5901	(P)	APN128R APN128G ABN111	Without nameplate Without nameplate ON			
	Wall • Stand / 5 holes	Stand AGS5901S	(B) (B) (S) (S) (S) (S) (S) (S) (S) (S) (S) (S	ABN111 ASN311	OFF HAND-AUTO			
	Wall • Stan	Wall Mount AGSM5901	AAA PPP	(Note) AM ammeter	Without nameplate Without nameplate			
		Stand AGSM5901S		ABN111 ABN111	ON OFF			

Note: Specify the Type No. of the meter to select a required capacity.

### **Ordering Information**

- When ordering control stations with control units: Specify the Ordering Type No. of the control station.
- When ordering enclosures without control units, specify the following items.
  - 1. Ordering Type No. of the enclosure
- 2. Ordering Type No. and specifications of the control units to be mounted (lens color, button color, etc.)
- 3. Nameplate
- Lead-in fitting
   Only when ordering the gland hub for leading in cables, specify Type No. and the cable outside diameter (R).
- 5. Other specifications

### **Ordering Example**

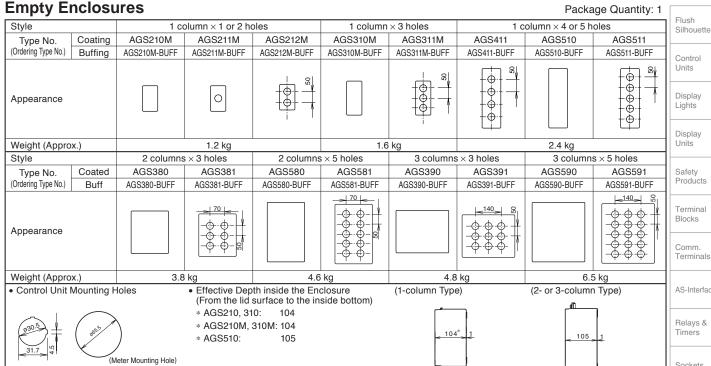
1 2
3 4
56
78
9 10

Type No. of Encl	osure	AGS
	12	APN128R
	34	APN126G
Control Unit and Nameplate	56	ABN210B, with NA-1
and Namepiate	78	ABN201R, with NA-2
	910	ASN311, with NA-32

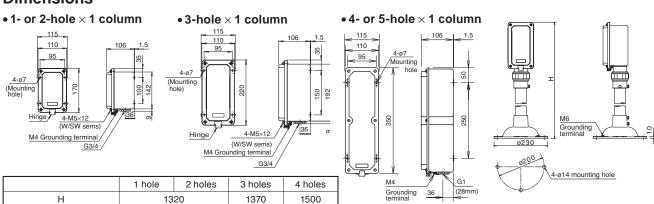
Note: Any ø30 mm series control units are selectable. Take into consideration the degree of protection of the control unit and the effective depth of the enclosure.



### **AGS** Series Control Stations

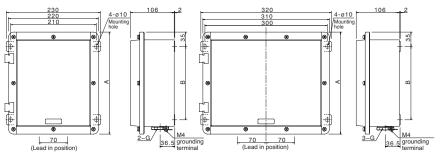


### **Dimensions**

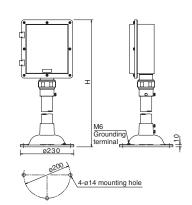


		1 11016	2 110163	0 110163	4 110163
	Н	13	20	1370	1500
Weight	Wall Mount	1.2	kg	1.6 kg	2.4 kg
(Approx.)	Stand	6.8	kg	7.2 kg	8.0 kg

#### • 2-, 3-, 4- or 5-hole × 2 columns • 2-, 3-, 4- or 5-hole × 3 columns



			2-colun	nn Type		3-column Type				
		2 holes	3 holes	4 holes	5 holes	2 holes	3 holes	4 holes	5 holes	
	A 250		350		50		350			
	B 180		280		180		280			
	Н	14	00	1500		1400		1500		
	G	3/4 (2	2 mm)	1 (28 mm)		3/4 (22 mm)		1 (28 mm)		
Weight	Wall Mount	int 3.8 kg		4.6	4.6 kg		4.8 kg		kg	
(Approx.)	Stand	9.3	kg	10.4 kg 10.6 kg		12.2	2 kg			



All dimensions in mm

Control

Display Lights

Display

Safety Products

Terminal Blocks

Terminals

AS-Interface

Relays & Timers

Sockets

Circuit

Power Supplies

PLCs & SmartRelay

Operator Interfaces

Sensors

Protection

References

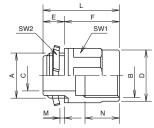
1307

# **Control Station Accessories**

### **Lead-in Fittings**

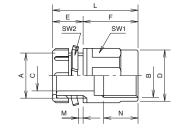
### • Entrance Hub (For Connecting Conduit)





HN





Made of aluminum (supplied with a locking nut)

Made of iron (supplied with a locking nut and a bushing)

### Package Quantity: 1

Material	Type No.	Applicable	Threa	d Size	Outside Dimensions								
Ivialeriai	(Ordering Type No.)	Conduit	A (male)	B (female)	С	D	E	F	L	М	N	SW1	SW2
Aluminum	HNA22	22 mm	G3/4	G3/4	18	32	15	31	46	7	18	32	33
Aluminum	HNA33	28 mm	G1	G1	23	38	16	35	51	7	23	38	41
	HN21	16 mm	G3/4	G1/2	13	26	23	27	50	9	21	26	33
	HN22	22 mm	G3/4	G3/4	18	32	23	36	59	9	22	32	33
Iron	HN31	16 mm	G1	G1/2	13	26	23	23	46	6	21	26	41
	HN32	22 mm	G1	G3/4	18	32	23	30	53	6	22	32	41
	HN33	28 mm	G1	G1	23	38	23	41	64	6	25	38	41

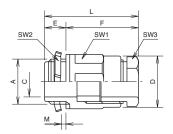
Note: Standard coating color: Yellow semi-gloss (melamine coating)

SW1: Hub size across flats SW2: Locking nut size across flats

### • Gland Hub (For Lead in Cable)

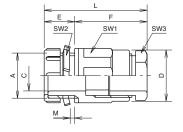
**HNAG** 





**HNG** 





Made of aluminum (supplied with a locking nut)

Made of iron (supplied with a locking nut and a bushing)

### Package Quantity: 1

Material Type No. (Ordering Type No.)		App	Applicable Cable Diameter (R)		e Outside Dimensions (mm)								
	(Ordering Type No.)		. ,	Α	С	D	Е	F	L	М	SW1	SW2	SW3
Die-cast	HNAG22R *	13, 15, 17		G3/4	18	32	15	47	62	7	32	33	29
aluminum	HNAG33R *	18, 20, 22	The tolerance of cable diameter	G1	23	38	16	53	69	7	38	41	35
	HNG21R *	8, 10, 12	is +0 to -2 mm	G3/4	13	26	23	39	62	9	26	33	23
	HNG22R *	13, 15, 17	(Example) When R = 15, the applicable	G3/4	18	32	23	48	71	9	32	33	29
Cast iron	HNG31R *	8, 10, 12	cable outside diameter is	G1	13	26	23	35	58	6	26	41	23
	HNG32R *	13, 15, 17	ø13 to 15 mm.	G1	18	32	23	42	65	6	32	41	29
	HNG33R *	18, 20, 22		G1	23	38	23	54	77	6	38	41	35

Note 1: Specify an applicable cable diameter code in place of  $\ast$ .

Note 2: Standard coating color: Yellow semi-gloss (melamine coating)

Note 3: Material of gland: Brass (nickel-plated surface) Note 4: When ordering, specify the Ordering Type No.

For example, when ordering the HNG21 with an applicable cable diameter of ø10, specify HNG21R10.

SW1: Hub size across flats SW2: Locking nut size across flats SW3: Gland size across flats

### **Control Station Accessories**

### **Nameplates**

### • KGNW/AGAW (For ø 22 TW Series Control Units)

When ordering, specify the Ordering Type No.

Treatment (1 or 2 12 111 delines delines, entire)					, , , , , , , , , , , , , , , , , , , ,				
Name & Shape Legend		Specifications	Type No.	Ordering Type No.	Package Quantity	Description	Control		
NWA				NWA-0	1		Units		
	Without	Aluminum	NWA-0	NWA-0PN10	10	Black background	Display Lights		
<del>1</del>		Thickness 0.8 mm		NWA-*	1	· White letters on	B: 1		
	With		NWA-*	NWA-*PN10	10	black background	Display Units		
NWAQ				NWAQ-0	1		Safety Products		
0FF	Without	Aluminum	NWAQ-0	NWAQ-0PN10	10	Black background			
2 5 5	Men	Thickness 0.8 mm		NWAQ-*	1	White letters on	Terminal Blocks		
÷ <u>+</u>	With		NWAQ-*	NWAQ-*PN10	10	black background	Comm.		
NWAS							Terminals		
45	45		NIMAC O	NWAS-0	1		AS-Interfac		
4-	Without	Thickness 0.8 mm	NWAS-0			Black background			
				NWAS-0PN10	10		Relays & Timers		

<sup>•</sup> Specify a legend code in place of \* in the Ordering Type No.

### • KGN/AGA/AGS (For ø30 Series Control Units)

When ordering, specify the Ordering Type No.

Name & Shape	Legend	Specifications	Type No.	Ordering Type No.	Package Quantity	Description
NA 40	Without		NA-0	NA-0	1	
24.5	VVIIIIOUI	Aluminum	INA-0	NA-0PN10	10	· Black background · White letters on
	With	Thickness 1.2 mm	NA-*	NA-*	1	black background
33,35	VVILLI		INA-*	NA-*PN10	10	

<sup>•</sup> Specify a legend code in place of \* in the Ordering Type No.

### • Legend on Nameplate

Code	Legend
1	ON
2	OFF
3	START
4	STOP
31	OFF-ON
35	HAND-AUTO
53	HAND-OFF-AUTO

### • Material of Nameplates for Control Units

In addition to the nameplates made of aluminum, nameplates made of plastic are also available.

### • Nameplates for Various Uses

In addition to the nameplates for control units, nameplates for various uses made of plastic or stainless steel are also available.

Silhouette

AS-Interface

Sockets

Circuit Protectors Power

Supplies PLCs &

Operator Interfaces

Sensors

Explosion Protection

