

KGN Series Control Stations

IP40 Enclosed Steel Control Stations For ø30 mm TWN/TWND Series Switches/Pilot Lights Various Control Stations are Available

Various control stations are available with most widely used combinations of switches/pilot lights (contact configurations, voltage, button colors, and nameplates).



Specifications

Degree of Protection	IP40 (IEC60529)
Material (Enclosure)	Carbon steel plate (t=1.0mm)
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)
Style	Wall mount (1 to 5 holes)
Cable Lead-in (Wall Mount)	Double knockouts On top: ø22 and ø27 mm On bottom: ø16 and ø20 mm
Applicable Switches/Pilot Lights	IDEC ø30 mm TWN/TWND series

Note 1: Buzzer: 2000V AC, 1 minute

Note 2: Buzzer: -10 to +40°C

Contact Ratings (Contact Block)

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

Operational Voltage and Current by Utilization Category

Operational Voltage		24V	48V	50V	110V	220V	440V
Operational Current	AC (50/60Hz)						
	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	3A	1A
DC	DC-12 Control of resistive loads and solid state loads	10A	5A	—	2.2A	1.1A	—
	DC-13 Control of electromagnets	5A	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 Style	Supplied Bushing			Applicable Knockout Hole
	Part No.	Outside Dia.	Inside Dia.	
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

Switches/Pilot Lights Mounting Holes

The holes for mounting switches/pilot lights 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 ø20 and ø22 mm holes, and 3- and 5-hole enclosures with a bushing to fit a ø27 mm hole.



Control Stations with Switches/Pilot Lights

The control stations are available with a selected combination of switches/pilot lights as listed below. For the dimensions and mounting centers, see the figures on page 26.

Switch/Pilot Light	Part No.	Specifications
Pushbutton (PB)	ABN110 *	Flush, 1NO
	ABN101 *	Flush, 1NC
	ABN111 *	Flush, 1NO-1NC
	ABN311R	ø40 mushroom, 1NO-1NC
	ABBN1110 **	Flush, double beam latching, 1NO
	ABBN1111 **	Flush, double beam latching, 1NO-1NC
Pilot Light (PL) (LED)	APN116DN *	Dome, 100/110V AC
	APN126DN *	Dome, 200/220V AC
Selector Switch (SS)	ASN211N	Knob, 2-position, 1NO-1NC
	ASN320N	Knob, 3-position, 2NO
	ASN2K11N-N024401	Key, 2-position, 1NO-1NC
Buzzer (BZ)	AZ11N	110V AC
	AZ12N	220V AC

Note: Specify a button or lens color code in place of *:

Pushbutton: B (black), G (green)

Pilot Light: G (green), R (red)

Control Stations

Package Quantity: 1



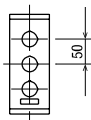
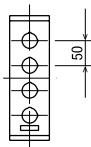
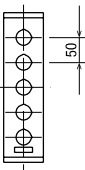
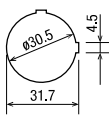
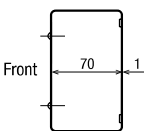
Control Station		Mounted Switch/Pilot Light		
Style	Part No.	Symbol	Part No.	NA Nameplate Legend
Wall Mount 1 hole	KGN1101NY *		ABN110 *	ON
	KGN1102NY		ABN311R	OFF
	KGN1103NY		APN116DNR	Without nameplate
	KGN1104NY		APN126DNR	Without nameplate
	KGN1105NY		ASN211N	HAND-AUTO
	KGN1106NY		ASN320N	HAND-OFF-AUTO
	KGN1107NY		ASN2K11N-N024401	OFF-ON
	KGN1108NY		AZ11N	Without nameplate
Wall Mount 2 holes	KGN2101NY *		ABN110 * ABN101R	ON OFF
	KGN2102NY *		ABN111 * ABN111R	ON OFF
	KGN2103NY		APN116DNR APN116DNG	Without nameplate
	KGN2104NY		APN126DNR APN126DNG	Without nameplate
	KGN2105NY *		APN116DNR ABN111 *	Without nameplate STOP
	KGN2106NY *		APN126DNR ABN111 *	Without nameplate STOP
	KGN2107NY		APN116DNR ASN211N	Without nameplate HAND-AUTO

Specify a button color code in place of * : B (black), G (green)

Control Station		Mounted Switch/Pilot Light		
Style	Part No.	Symbol	Part No.	NA Nameplate Legend
Wall Mount 2 holes	KGN2108NY		APN126DNR ASN211N	Without nameplate HAND-AUTO
	KGN2109NY		APN116DNR ASN2K11N-N024401	Without nameplate OFF-ON
	KGN2110NY		APN126DNR ASN2K11N-N024401	Without nameplate OFF-ON
	KGN2113NY *		ABN110 * ABN311R	ON OFF
	KGN2116NY *		AZ11N ABN111 *	Without nameplate
	KGN2117NY *		AZ12N ABN111 *	Without nameplate
	KGN2118NY		AZ11N APN116DNR	Without nameplate
	KGN2119NY		AZ12N APN126DNR	Without nameplate
Wall Mount 3 holes	KGN3102NY *		APN116DNR ABN110 * ABN101R	Without nameplate ON OFF
	KGN3103NY *		APN126DNR ABN110 * ABN101R	Without nameplate ON OFF
	KGN3104NY *		ABN111 * ABN111R ASN211N	ON OFF HAND-AUTO
Wall Mount 4 holes	KGN4101NY *		APN126DNR APN126DNG ABN111 * ABN111R	Without nameplate Without nameplate ON OFF
	KGN4102NY *		APN126DNR ABN111 * ABN111R ASN211N	Without nameplate ON OFF HAND-AUTO

Empty Enclosures

Package Quantity: 1

Style	Part No.	Unit Mounting Hole	Switch/Pilot Light Mounting Centers
1 hole (approx. 0.4 kg)	KGN111Y	With	
	KGN110Y	Without	
2 holes (approx. 0.5 kg)	KGN211Y	With	
	KGN210Y	Without	
3 holes (approx. 0.6 kg)	KGN311Y	With	
	KGN310Y	Without	
4 holes (approx. 0.7 kg)	KGN411Y	With	
	KGN410Y	Without	
5 holes (approx. 0.8 kg)	KGN511Y	With	
	KGN510Y	Without	
Switch/Pilot Light Mounting Hole		Effective Depth inside the Enclosure	
			
All dimension in mm			

Accessories

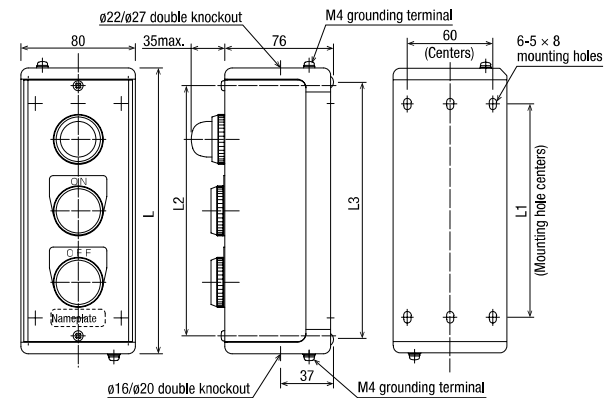
Package Quantity: 1

Name	Part No.	Applicable Enclosure	Applicable Knockout Hole
Rubber Bushing	GB-2	KGN111Y	ø20 or ø22 mm
		KGN110Y	
		KGN211Y	
		KGN210Y	
	GB-3	KGN311Y	ø27 mm
		KGN310Y	
		KGN411Y	
		KGN410Y	
		KGN511Y	
		KGN510Y	

Dimensions

All dimensions in mm.

KGN Control Station (Wall Mount)

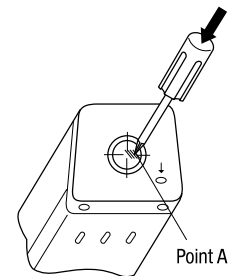


	1 hole	2 holes	3 holes	4 holes	5 holes
	111Y	212Y	313Y	414Y	510Y
L	100	150	200	250	300
L1	50	100	150	200	250
L2	75	125	175	225	275
L3	80	130	180	230	280
Weight (Approx.)	0.4 kg	0.5 kg	0.6 kg	0.7 kg	0.8 kg

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 switches/pilot lights:

Specify the Part No. of the control station.

When ordering enclosures without switches/pilot lights:

Specify the following items.

- Part No. of the enclosure
- Part No. and specifications of the switch/pilot light to be mounted (lens color, button color, etc.)
- Nameplate
- Other specifications

Ordering Example

	Part No. of Enclosure	KG N311Y
① ② ③	Switch/Pilot Light and Nameplate	① APN126DNR
		② ABN210B, with NA-1
		③ ABN201R, with NA-2

Note: Any ø30 mm TWN/TWND series switch/pilot lights are selectable. However, take the effective depth inside the enclosure into consideration.

Ordering Terms and Conditions

Thank you for using IDEC Products.

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

1. Notes on contents of Catalogs

- (1) Rated values, performance values, and specification values of IDEC products listed in this Catalog are values acquired under respective conditions in independent testing, and do not guarantee values gained in combined conditions.
Also, durability varies depending on the usage environment and usage conditions.
- (2) Reference data and reference values listed in Catalogs are for reference purposes only, and do not guarantee that the product will always operate appropriately in that range.
- (3) The specifications / appearance and accessories of IDEC products listed in Catalogs are subject to change or termination of sales without notice, for improvement or other reasons.
- (4) The content of Catalogs is subject to change without notice.

2. Note on applications

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

3. Inspections

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

4. Warranty

(1) Warranty period

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

(2) Warranty scope

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

- i. The product was handled or used deviating from the conditions / environment listed in the Catalogs
- ii. The failure was caused by reasons other than an IDEC product
- iii. Modification or repair was performed by a party other than IDEC
- iv. The failure was caused by a software program of a party other than IDEC
- v. The product was used outside of its original purpose
- vi. Replacement of maintenance parts, installation of accessories, or the like was not performed properly in accordance with the user's manual and Catalogs
- vii. The failure could not have been predicted with the scientific and technical standards at the time when the product was shipped from IDEC
- viii. The failure was due to other causes not attributable to IDEC (including cases of force majeure such as natural disasters and other disasters)

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

5. Limitation of liability

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

6. Service scope

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

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

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

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