

#### INSTALLATION, OPERATION & MAINTENANCE DATA SHEET SERIES HKH CONTACT BLOCKS For Use In Zone Classified Hazardous Locations



# SERIES HKH CONTACT BLOCKS

For Use In Zone Classified Hazardous Locations

## Single Pole / NO or NC / DIN rail or Panel Mount

Catalog Numbers: HKH1NO20D / HKH1NO20P / HKH1NC20D / HKH1NC20P

### 1. General Safety Information:

## CAUTION:

Before installing, make sure you are compliant with area classifications, failure to do so may result in bodily injury, death and property damage. Do not attempt installation until you are familiar with the following procedures. All installation must comply with the applicable Electrical Code.

Make sure that the circuit is De-energized before starting installation or maintenance.

Verify that the installation is grounded. Failure to ground will create electrical shock hazards, which can cause serious injury and or death.

### IMPORTANT:

Please read these instructions carefully before installing or maintaining this equipment. Good electrical practices should be followed at all times and this data should be used as a guide only

Technical information, advice and recommendations contained in these documents is based upon information that Killark believes to be reliable. All the information and advice contained in these documents is intended for use only by persons having been trained and possessing the requisite skill and know-how and to be used by such persons only at their own discretion and risk. The nature of these instructions is informative only and does not cover all of the details, variations or combinations in which this equipment may be used, its storage, delivery, installation, check out, safe operation and maintenance.

Since conditions of use of the product are outside of the care, custody and control of Killark, the purchaser should determine the suitability of the product for his intended use, and assumes all risk and liability whatsoever in connection therewith.









Oxford Street West Ashton Under Lyne Lancashire OL7 0NA, UK

2112 Fenton Logistics Park Blvd. Fenton, MO 63026

P/N KIL00921402 FORM NO. K1402 R05/20 ECO-3-018-20



Panel mount N.O.contact block



DIN-rail mount N.C.contact block

### 2. Conditions of Safe Use

For US/CAN Applications: Contact block shall be mounted to provide a minimum clearance of 14 mm and minimum creepage of 21.6 mm.

For ATEX/IECEx Applications: Contact block shall be mounted to provide a minimum clearance of 10 mm and minimum creepage of 16 mm.

**<u>a</u>:** DIN-rail or Operator (Panel) mounted Series HKH Contact Blocks are intended for use in Hazardous Locations when installed with mounting means provided (as described below).

<u>b:</u> DIN Rail mounted version is intended to be installed on a modified (V-Notched) 35mm x 7.5mm DIN rail (EN 50022).

<u>c:</u> Series HKH Contact blocks carry certifications as stand-alone components, and are Certified for use with Hubbell Series HKH Actuators. When used with other than Certified Series HKH Actuators, the suitability of the design and performance must be evaluated in the end-product.

<u>d:</u> Contact blocks are intended to be installed in a suitable Ex enclosure, where the suitability is determined in the end application.

e: All conductors shall be suitable for both the minimum ambient and the maximum temperature achieved in service.

<u>f:</u> The non-metallic contact block body was tested for a maximum service temperature of 100°C. It shall not attain a temperature more than 100°C when used in service.

<u>**g**</u>: The  $\#3-28 \times 0.320$  in. contact block housing fasteners have a minimum yield strength of 210 MPa for stainless steel or 340 MPa for steel).

<u>h:</u> Contact the mfr. for information on the dimensions of flameproof joints.

i: IP 20 Guarded Finger-safe terminals to prevent accidental contact with live parts.

<u>i</u>: Silver Alloy contacts with Gold Flashing are provided for switching requirements below 100ma @ 20V.

<u>k:</u> Care should be taken not to damage the DIN-rail mounting clips when removing the Series HKH Contact Blocks with a tool. DO NOT attempt to install a Contact Block with a damaged or broken clip.

**WARNING:** Electrical shock or personal injury can result from device misalignment. Be sure actuators align properly with each contract block plunger after installation.









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### 3. Certification Information:

#### North American ratings:

Class I, Zone 1, AEx db eb IIC Gb (US) Ex db eb IIC Gb U (CAN) Class I, Division 2, Groups A, B, C, D -55°C  $\leq$  T ambient  $\leq$  +60°C

<u>Electrical Ratings</u>: 690Vac, 20A, 50-60Hz 60Vdc, 5A, 110Vdc, 2A, 255Vdc, 1.5A ½ HP@120Vac, 1 HP@208/240/277Vac A600/P600 – Pilot Duty 350Vac – Tungsten Lamp

<u>Wiring Instructions:</u> WIRE STRIP – 3/8 in. TORQUE – 15 LB in. WIRE RANGE with 1 OR 2 WIRES: #22 to #12 AWG (SOL & STR) and #10 AWG (STR)

UL and CSA Standards Applied:

CSA 60079-0 UL 60079-0 CSA 60079-7 UL 60079-7 CSA 60079-1 UL 60079-1 UL508 IEC 60529

#### IEC / ATEX Ratings:

2813 (6) | M 2 Ex db eb | Mb\*\* 2813 (6) | I 2 G Ex db eb | C Gb DEMKO 12 ATEX 1202251U

Ex db eb I Mb\*\* Ex db eb IIC Gb IECEx UL 12.0033U

\*\* - Certified for use in Mining Equipment when installed in a suitable Equipment Group I enclosure.

 $-55^{\circ}C \le T$  ambient  $\le +60^{\circ}C$ 

IEC Utilization Codes: AC690V 16A AC-12, 50-60Hz AC230V 16A AC-15, 50-60Hz DC60V 5A DC-13 DC125 1A DC-13

Wire Allowances: WIRE STRIP – 10mm TORQUE – 1.7 N m WIRE RANGE with 1 OR 2 WIRES: 0.5 to 2.5mm<sup>2</sup> (SOL & STR) and 4.0mm<sup>2</sup> (STR)

IEC and BS EN Standards Applied: EN 60079-0 IEC 60079-0 EN 60079-7 IEC 60079-7 EN 60079-7

IEC 60079-1

#### T-Codes in +60 °C ambient application:

**T4:** when maximum continuous load currents are greater than 10 Amps.

Complies with EMC, RoHS, Low Voltage and ATEX directives, and the IECEx scheme.

CE

**T6:** when continuous load currents are 10 Amps OR LESS when using #14 AWG (2.5 mm<sup>2</sup>) wire or larger.

## DO NOT REMOVE THE TAMPER-PROOF SCREWS OR ATTEMPT TO OPEN OR ALTER THE SERIES HKH CONTACT BLOCKS.









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