

# INSTALLATION, OPERATION & MAINTENANCE DATA SHEET

EXB---N34 CEN Series Flameproof Controller Type
Housing for Electrical Apparatus
PTB 07 ATEX 1024
IEC Ex PTB 07.0022

Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin, Notified Body No. 0102
Method of Protection



II 2 G Ex d IIB or Ex d IIB+H2 T6 or T5



II 2 D Ex tD A21 IP66 T 80 $^{\circ}$  C or T 95 $^{\circ}$  C Ta  $\leq$  +60 $^{\circ}$  C



## EXB---N34 CEN SERIES FLAMEPROOF CONTROLLER TYPE HOUSING FOR ELECTRICAL APPARATUS

#### **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:

All machining, drilling and tapping on this enclosure must be provided by killark. the ptb certifications are voided if field machining is done, the end supplier must bear the burden of proof for the final evaluation, testing and documentation.

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.













3940 Dr. Martin Luther King Drive St. Louis, MO 63113

### **1. AMBIENT TEMPERATURE:**

Range -20° C ... +60° C

#### 2. ELECTRICAL DATA:

Rated Voltage: Up to 690 Volts Rated Current: 1000 Amps

Maximum Conductor Size: 500 mm2 (1000MCM)

Maximum

#### 3. CONDUIT FITTINGS:

Conduit seals and fittings must be certified "EEx d" components per EN 50018 or EN 60079-1 whose design and installation comply with American and British standards. Sealing fittings must be installed within 18" of this enclosure for IIB + H2 locations.

#### 4. CABLE FITTINGS:

Cable fittings must be certified "EEx d" components per EN 50018 or EN 60079-1. For lines which are not permanently installed, only cable fittings appropriate for this purpose can be used. They are to be protected from loosening and locked against rotation, i.e. clips, cemented, etc., per EN 50018 or EN 60079-1

### 5. UNUSED OPENINGS:

All unused openings must be closed with a Killark CUP, CUPX, PLUG, GO-8177 series close-up plug or an "EEx d" certified close-up plug or sealing plug per EN 50018 or EN 60079-1.

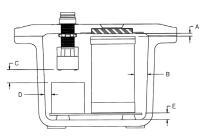
# 6. PILOT DEVICES AND OPERATING HANDLE ASSEMBLIES:

Killark's "G" series pilot devices and "EXH / B7" series operating handles may be factory or field assembled in this enclosure. The installation of pilot devices, operating handles and internal components must comply to the spacing requirements in FIGURE 1. The Killark factory must do the machining for operators and handles. Other manufacturers pilot devices which are certified "EEx d" components per EN 50018 or EN 60079-1.

#### 7. FUSES:

If fuses are installed, an external caution label <u>must</u> be provided with the following information: "Change fuse in the de-energized state only. Use \*\*\* Volt \*\* Amp (class) Fuse."

### FIGURE 1: "EXB" ENCLOSURE/ DEVICE SPACING



"EXB" ENCLOSURE / DEVICE SPACINGS

Α	1/16" (1.58mm) MIN.
В	1/2" (12.7mm) MIN.
С	1" (25.4mm) MIN.
D	1/2" (12.7mm) MIN.
Ε	1/2" (12.7mm) REF.











#### 8. DESCRIPTION OF MATERIAL:

Boxes and covers are made of cast aluminum alloy, rectangular shape. Cover fixed with bolts. Enclosures may be provided with windows, operating rods & pilot lights. These accessories shall be non-detachable by use of a locknut, a locking screw or glue in the threaded joint.

#### 9. BATTERIES:

Operation of batteries and storage of batteries in this enclosure must be such that short-circuits, overload and overcharging are avoided. Components that are fed by the internal voltage source are to be covered by a safe-to-touch method. An external caution label <u>must</u> be provided with the following marking: "Attention: Internal Voltage Source."

# 10. HEAT PRODUCING COMPONENTS:

If components are installed inside the enclosure that have a surface temperature above the temperature class, an external caution label <u>must</u> be provided with the following marking: "Attention: Hot surfaces in the interior. Open housing only after a waiting time of 15 minutes."

### 11. CAPACITORS:

When capacitors are installed in the enclosure, the energy for group IIB is limited to 0.06mJ (VDE 0165, section 6.1.5) by the appropriate protective elements

#### MAXIMUM WATTAGE CHART

Power loss when used in temperature class T6 and T5 are as follows:

Enclosure	T6 Max	T5 Max	Enclosure	T6	T5 Max
	Watts	Watts		Max	Watts
				Watts	
EXB-664	95	135	EXB-14146	280	385
EXB-886	130	185	EXB-14148	315	465
EXB-8104	130	185	EXB-16166	315	460
EXB-8106	155	225	EXB-16168	340	500
EXB-8126	185	270	EXB-16248	495	735
EXB-8128	205	310	EXB-162410	530	785
EXB-10106	195	280	EXB-18186	400	585
EXB-10108	210	310	EXB-18188	440	650
EXB-10146	235	335	EXB-18248	495	740
EXB-10148	255	380	EXB-182410	535	790
EXB-12126	205	310	EXB-18368	685	1020
EXB-12128	240	350	EXB-183610	725	1085
EXB-12186	280	385	EXB-203611	870	1300
EXB-12188	315	465	EXB-24248	610	910
EXB-12246	350	500	EXB-242410	650	975
EXB-12248	385	565	EXB-24308	650	975
EXB-122412	495	740	EXB-24368	850	1265
EXB-12368	550	795	EXB-243610	900	1350
EXB-123610	590	875			











#### 12. INSTALLATION INSTRUCTIONS

Trained, qualified and competent personnel must install this terminal box. Installation must comply with local, state and country regulations, as well as safety practices for this type of equipment.

WARNING: Electrical power must be OFF during installation. Disconnect all power sources and lock out. The mounting location must be flat and provide proper clearance, rigidity and strength to support the terminal box.

Securely fasten the enclosure to the mounting location, using up to a 1/2" or M12 diameter steel bolt and washer. Install cable glands or conduit using an approved electrical conducting type lubricant on the threads. The glands and conduit must be either a tapered pipe thread conforming to ANSI/ASME B1.20.1 standard or a ISO metric thread standard.

NOTE: Inspect and clean the machined surfaces of both the box and cover. Clean surfaces by wiping with a clean lint-free cloth. Apply a light coating of Killark "LUBG" lubricant to the box flange. Install and tighten cover bolts to the box and torque the bolts to 30ft/lbs. When installing a breather / drain, they must be approved for the specific hazardous location the enclosure is being installed in.

#### 13. MAINTENANCE INSTRUCTIONS

After installation, the unit should be inspected at regular intervals verify the cover bolts are tight; that all conduit or gland connections are intact and free of corrosion and that the enclosure mounting bolts are tight and in good condition. WARNING: Electrical power must be OFF before servicing the enclosure. Disconnect the enclosure from all power sources and lock out. Inspect the machined surfaces of both the box and the cover. The surface must be free of nicks, dirt or any foreign particle build-up that would prevent a proper seal. Should the flange surface be damaged, consult factory. Never attempt to rework the surface flange in the field. Apply a light coating of Killark "LUBG" lubricant to the box surface flange before re-installing on the box. Wrench down cover bolts and torque the bolts to 30ft lbs.









