DOVER INDIA PRIVATE LIMITED,
No.33, S.no.385/1D,Pazhanchur,
Chennai - Bangalore highway, Mevalurkuppam ,
Thiruvallur District - 600123,
Tamil Nadu, India.

Herewith we declare that all sizes of Blackmer pump models: CRL, FFNP, GX, GNX, GNXH, HXL, HXLJ, LGB, LGF, LGLH, LGL, LGLD, LGRL, LGRLF, MAX, MLN, MRLN, MLX, MRLX,MRLXW, NP, NPH, PV, PVS, SGL, SGLD, SMVP, SNP, STX, SX, TLGLF, TX, TXD, TXDI, TXS, TXSD, TXH,TXV, X, XB, XF, XH, XL, XLF, XRLF, XLW, XRL & XU to which this declaration relates are in conformity with the provisions of the ATEX Directive 2014/34/EU. The above equipment is a sliding vane, positive displacement pump designed for fluid transfer applications. This device is not intended to act as a safety accessory. Technical file is archived with LCIE notified body.

Applied Harmonized Standards: EN1127-1:2019, EN80079-36:2016
Applied National Technical Standards: UL51 (LPG/NH_3 pumps), UL79

30 October 2019
V.Ravi Prasad — Date
General Manager

DECLARATION OF CONFORMITY

As defined by the Machinery directive 2006/42/EC, Annex II A

Herewith we declare that all sizes of Blackmer pump models: CRL, FFNP, GX, GNX, GNXH, HXL, HXLJ, LGB, LGF, LGLH, LGL, LGLD, LGRL, LGRLF, MAX, MLN, MRLN, MLX, MRLX, MRLXW, NP, NPH, PV, PVS, SGL, SGLD, SMVP, SNP, STX, SX, TLGLF, TX, TXD, TXDI, TXS, TXSD, TXH, TXV, X, XB, XF, XH, XL, XLF, XRLF, XLW, XRL & XU to which this declaration relates are in conformity with the provisions of the Machinery Directive, 2006/42/EC. The above equipment is a sliding vane, positive displacement pump designed for fluid transfer applications. This device is not intended to act as a safety accessory.

Blackmer further declares that the above listed pumps are designed using sound engineering practices and are assembled in ISO registered facilities. These pumps are in compliance with all applicable harmonized standards and therefore all pumps carry the CE marking.

Applied Harmonized Standards: EN1127-1:2019, EN80079-36:2016
Applied National Technical Standards: UL51 (LPG/NH_3 pumps), UL79

30 October 2019
V.Ravi Prasad — Date
General Manager

ATEX/ Machinery Directive Notifications:

Pump Temperature Classification: Pumps are devices whose surface temperatures depend on the product temperature. Therefore, temperature classifications of Blackmer pumps are obtained with the temperature limits of the product pumped, see the table listing below. Any overshooting of the maximum product temperature is considered an abnormal operation, that can lead to surface temperatures higher than the certified temperature classification. The user of the pump must ensure that the product temperature must never exceed the maximum temperature specified. For example, installing a temperature sensor upstream of pump is an acceptable means to control product temperature.

Intended Use: Blackmer Pumps are intended to be used for transferring fluids including Liquefied Gases. Most Blackmer pumps are configured with an internal relief valve to limit the pump differential pressure. Using the pump as a recirculation device is considered an abnormal operation that can lead to exceeding the maximum surface temperature classification.

Possible Misuse Warning: The pump must only be installed in systems designed for its intended use.

Mechanical Ignition Sources: Guards, intended to protect from personal injury from rotating components, must be fabricated from ATEX compliant materials to prevent a potential ignition source. The pump and its' drive system must be properly grounded to prevent electrostatic discharge. ATEX certified elastic couplings must be used. These couplings must have a level of protection equivalent or better than that of the pump unit. The pump has internal parts that rub together. These parts require pumpage to lubricate the rubbing surfaces. If the pump is run dry for periods of over one minute, maximum surface temperature may exceed the pump classification temperature. Consequently, every time the pump is started, an operator must check that there is a flow through the pump. Liquid level or flow detector controls may be necessary to prevent dry running. These devices must comply with the standards in force, especially those related to electric devices in explosive atmospheres and/or standard EN 80079-36 related to the protection of non-electric equipment in explosive atmospheres by controlling sources of ignition. Pumps must be properly maintained and lubricated, see IOM (Installation, Operation, & Maintenance Instructions) for service information. Ball bearings should be replaced every 2000 hours of use.

Packing Seal Pumps: Standard (SNP/NP) model pumps and (MLN, MRLN) model pumps are equipped with packing seals which must be properly adjusted, see IOM. All pumps equipped with packings must be equipped with a temperature controlling device to prevent exceeding the maximum surface temperature.

Magnetically Coupled Pumps: (MVP/SMVP) model pumps require additional ignition hazard precautions to prevent an excess temperature condition. Magnetically coupled pumps must be maintained on a regular basis as excessive bushing wear and/or loose magnets can result in rubbing contact with the containment can, see IOM.

Sound Measurements: Sound Levels for pumping equipment vary greatly, depending on operating conditions, piping system design, foundation design, etc. Probably the greatest effect on sound level is the presence of cavitation, which is primarily dependent on system design and often, increases dramatically during system upset. You can expect the following sound levels when operating a Blackmer pump at its' maximum rated speed and discharge pressure with NO cavitation. Sound levels are measured at 1 meter from the pump and 1.6 meters from the foundation per European Machinery Directive 2006/42/EC.

Maximum Noise Level: 85 dba

Equipment Marking: All pump models are classified Group II Category 2 & 3, Gas Group IIB. Temperature limiting devices are required for NP, MLN, MRLN, MVP, SMVP, SNP and TX(/D/DI/S/SD/H) models which need to be classified as Category 2. Contact Blackmer Customer Care Group for your specific requirements. Blackmer will process those requests as a special order. See attached chart for Temperature rating for various models.

Temperature Class	Maximum Product Temperature	Pump Model (inclusive all sizes, drive options, & relief valve arrangements)
T2	250 ° C	NP (with jackets or electric heater elements*)
T3	150 ° C	HXLJ (with jackets*), (MLN, MRLN, MLX, MRLX, MRLXW with jackets*), TXV
T4	80 ° C	CRL, CRLR FFNP, GX, GNX, GNXH, HXL, MLN, MRLN, MLX, MRLX, MRLXW, NP, NPH, PV, PVS, SNP, SX, STX, TX, TXD, TXDI, TXS, TXSD, TXH, X, XB, XF, XL, XLF, XRLF, XLW, XRL, XU,
T5	80 ° C	LGB, LGF, LGL, LGLD, LGLH, LGRL, LGRLF, MAX, SGL, SGLD, SMVP, TLGLF

* For pumps with steam jackets the steam temperature must not exceed the maximum product temperature.