IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEx BAS 16.0053U**

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Certificate history:

Status: **Current**

Issue No: 3

Issue 2 (2021-04-22)
Issue 1 (2020-07-21)
Issue 0 (2018-03-27)

Date of Issue: 2022-11-22

Applicant: **MCT Brattberg AB**
Karlskrona
SE 371-92
Sweden

Ex Component: RGP Range of multi cable transits

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Increased Safety, Dust Protection by Enclosure**

Marking: **Ex eb IIC Gb**

Ex tb IIIC Db

Service Temperature (-40°C to +70°C) IP65

Approved for issue on behalf of the IECEx Certification Body: **R S Sinclair**

Position: **Technical Manager**

Signature: (for printed version) pp D. Brearley

Date: (for printed version) 22/11/2022

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire, SK17 9RZ
United Kingdom

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Certificate No.: **IECEx BAS 16.0053U**

Date of issue: 2022-11-22

Issue No: 3

Manufacturer: **MCT Brattberg AB**
Karlskrona
SE 371-92
Sweden

Manufacturing locations: **MCT Brattberg AB**
Karlskrona
SE 371-92
Sweden

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :
The component and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the component listed has successfully met the examination and test requirements as recorded in:

Test Reports:

GB/BAS/ExTR16.0121/00 GB/BAS/ExTR20.0109/00 GB/BAS/ExTR21.0031/00
GB/BAS/ExTR22.0178/00

Quality Assessment Report:

GB/BAS/QAR08.0009/10

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Ex Component(s) covered by this certificate is described below:

The RGP range of multi cable transits are a circular seal construction intended for use with circular cables or circular metal pipes. The construction incorporates a sleeve which may be welded, cast in concrete or bolted to an enclosure or building wall.

The RGP range of multi cable transits are assembled from the following:

a) RGP Sleeve / frames are detailed in matrix drawing No 1170407. The sleeve variants will either be component or equipment certified, depending upon how they are mounted. The RGP sleeves are available is 7 various sizes ranging from an inside diameter of 51mm which is designated 50, to inside diameter of 202mm which is designated 200, and 5 sizes of imperial equivalents from 3" to 8".

The sleeves are manufactured from metal and may be of machined or welded construction, with the material having a minimum tensile strength of 340 N/mm2. The sleeves /frames provide an aperture for the insertion of RGP Lycron A plug which when fitted with insert blocks seals around the cables or pipes. These Sleeves / frames may be plated or surface treated to suit the application.

b) RGP plugs, which have a circular outer design and a square inner construction, allow for the introduction of a variety of square blocks as described below. The plugs are available in the corresponding 7 sizes to the sleeves, and are given the designation of RGP 50, RGP50S, RGP 70, RGP 100, RGP 125, RGP 150 and RGP 200, and 5 sizes of imperial equivalents from 3" to 8".

The circular plugs are fitted into an equivalent circular RGP Sleeve / frames in a fully relaxed state, and when fitted with the corresponding blocks are tightened to a required torque via M4, M5, M6 or M8 fasteners. The tightening of the fasteners compresses the Lycron A material from which they are manufactured and displace the insert blocks to seal the cables / pipes. A variation of the frame may be manufactured with an open construction and is given the designation RGPO. The Frame may also be manufactured to provide EMC protection.

c) Solid rubber insert blocks manufactured from Lycron A. These blocks range from 20mm to 120mm square, and are 60mm in length. Blocks of this type are marked and designated 20/0 to 120/0. Solid rubber insert blocks are available for the RGP50S plug at a length of 30mm. A variation of the solid Insert Blocks may also be manufactured to provide EMC protection.

d) Insert blocks manufactured from Lycron A. These blocks have moulded semi-circular concave sections of fixed radius along their length, which when placed on top of each other form a square block of 20 to 120mm. The blocks have a central circular hole of fixed diameter, ranging from 4mm to 90mm depending on the block size, These blocks are 60mm in length, and when compressed form a seal around circular cables or pipes. Insert blocks are available for the RGP50S plug at a length of 30mm. All these blocks together with their associated cables or pipes are assembled in rows inside the frame up to a specified height, with the block halves designated and marked 20/4 to 120/90. A variation of the Insert Blocks may also be manufactured to provide EMC protection.

e) A variation to the insert blocks called an AddBlock, the AddBlock comes in 11 different sizes and provides tear off wing inserts which are of varying thickness. The wing inserts are manufactured with locating ridges, which when inserted into the furrows of the main block provide 55 different cable and pipe dimensions ranging from 3.5mm to 69.5mm. The AddBlocks have the option of being fitted with 9 different sizes of plug, which allows for ease of modification to existing installations. The manufacturer provides a variation to the AddBlock with E.M.C. capability as per the existing blocks.

SCHEDULE OF LIMITATIONS:

1. These transits are suitable for use within an operating temperature range of -40°C to +70°C.

2. The blocks must be assembled using the manufacturer's supplied tallow lubricant which must be applied to all faces of the sealing blocks prior to assembly.

3. The transits are only for use with circular cables and circular pipes.

4. Cables and pipes must be effectively clamped to prevent pulling and twisting being transmitted.

5. The fasteners of all variants shall be torqued up to the values defined below:

RGP50 = 3Nm
RGP50S = 2.5Nm
RGP70 = 4Nm
RGP100 = 6Nm
RGP125 = 7Nm
RGP150 = 12Nm
RGP200 = 15Nm

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6. The assembled frames and blocks shall be re-torqued after a period of 24 hours to the values listed above. The torque value shall then be checked again after 48 hours and re-tightened if required. This shall be completed prior to the installation being energised.

7. When the Sleeve is used for increased safety or dust protection, the Sleeve shall be suitably sealed (in accordance with IEC 60079-14) to maintain the ingress protection rating of the associated enclosure.

8. Non-metallic surfaces shall be protected from electrostatic charging hazards.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 3.1

The manufacturer requests a variation to the product marking to remove the marking stamped on the end of the blocks and update to the description to remove the references to this stamping.

ExTR: **GB/BAS/ExTR22.0178/00**	File Reference: **22/0509**