The attached documentation are certificates associated with AAA Products International intrically safe coil. The intrinsically safe coil is sold as an assembly which consists of a solenoid operator, coil, nut and din connector. The entire assembly is AAA part number V-564 and is Nass number 1433 72-340/5146. The Nass coil operator is number 1259 06-400/5146. The coil cannot be purchased separately.

AAA Part Number	Voltage	Nass Number
V-564	24 Volt D-C	1259 06-400/5146

Russ McKenna Engineer



# **Certificate of Compliance**

Certificate:	1141987

**Project:** 2659793

Issued to: Nass Magnet GmbH

Eckenerstrasse 4 - 6 Hannover, 30179 Germany Attention: Rudolf Barth Master Contract: 152603

Date Issued:

September 6, 2013

### The products listed below are eligible to bear the CSA Mark shown



D. Símpson Certífier

**Issued by:** D. Simpson Certifier

#### PRODUCTS

CLASS 3218 06 - INDUSTRIAL CONTROL EQUIPMENT - Miscellaneous Apparatus - For Hazardous Locations

#### Class I, Groups A, B, C and D; Class II, Groups E, F and G; Class III:

- Solenoid operators, Model 1259 06 400/5142 /5146; rated 24V dc, 0.05A; intrinsically safe (System) when connected to a CSA Certified barrier device, rated 28V max, 300 ohms min; intrinsically safe (Entity) with entity parameters of: Vmax = 28V, Imax = 115mA, Li = 0, Ci = 0 when installed per installation dwg 1259 06 400; Max Ambient 50 Deg C.

- Solenoid operators, Model 1259 06 450/5142 /5146; rated 24V dc, 0.05A; intrinsically safe (System) when connected to a CSA Certified barrier device, rated 28V max, 300 ohms min; intrinsically safe (Entity) with entity parameters of: Vmax = 28V, Imax = 115mA, Li = 0, Ci = 0 when installed per installation dwg 1259 06 450; Max Ambient 50 Deg C.

- Solenoid operators, Model 1259 16 450/5146; rated 24V dc, 0.05A; intrinsically safe (System) when connected to a CSA Certified barrier device, rated 28V max, 300 ohms min; intrinsically safe (Entity) with entity parameters of: Vmax = 28V, Imax = 115mA, Li = 0, Ci = 0 when installed per installation dwg 1259 16 450; Max Ambient 50 Deg C.

- Solenoid operator, Model 1259 50 450/5146; rated 24V dc, 0.05A; intrinsically safe (System) when connected to a CSA Certified barrier device, rated 28V max, 300 ohms min; intrinsically safe (Entity) with entity parameters of: Vmax = 28V, Imax = 115mA, Li = 0, Ci = 0 when installed per installation dwg 1259 50 450; Ambient - 40 to +85 Deg. C.



**Certificate:** 1141987 **Project:** 2659793 Master Contract:152603Date Issued:September 6, 2013

- Solenoid operator, Model EN-3198-22-XISC-D024; rated 24V dc, 0.05A; intrinsically safe (System) when connected to a CSA Certified barrier device, rated 28V max, 300 ohms min; intrinsically safe (Entity) with entity parameters of: Vmax = 28V, Imax = 115mA, Li = 0, Ci = 0 when installed per installation dwg 1259 12 450; Max Ambient 50 Deg C.

- Solenoid operator, Model EN-3198-22-XISC-44-D024; rated 24V dc, 0.05A; intrinsically safe (System) when connected to a CSA Certified barrier device, rated 28V max, 300 ohms min; intrinsically safe (Entity) with entity parameters of: Vmax = 28V, Imax = 115mA, Li = 0, Ci = 0 when installed per installation dwg 108-060-0022; Ambient -40 to +85 Deg C.

- Solenoid operator, Model VA10647; rated 24V dc, 0.05A; intrinsically safe (System) when connected to a CSA Certified barrier device, rated 28V max, 300 ohms min; intrinsically safe (Entity) with entity parameters of: Vmax = 28V, Imax = 115mA, Li = 0, Ci = 0 when installed per installation dwg 108-060-0085; Ambient -40 to +85 Deg C.

- Solenoid operator, Models 3039; rated 24V dc, 0.05A; intrinsically safe (System) when connected to a CSA Certified barrier device, rated 28V max, 300 ohms min; intrinsically safe (Entity) with entity parameters of: Vmax = 28V, Imax = 115mA, Li = 0, Ci = 0 when installed per installation dwg 1259 15 400; Max Ambient 50 Deg C.

Note: The above Solenoid Operators are **not** for use with "Safety Valves" and are intended for use but not limited for use with Process and Industrial Control equipment only.

#### **APPLICABLE REQUIREMENTS**

CAN/CSA-C22.2 No. 0-M91	General Requirements - Canadian Electrical Code, Part II
C22.2 No. 14-05	Industrial Control Equipment
C22.2 No. 25-1966	Enclosures for Use in Class II, Groups E, F and G Hazardous Locations
CAN/CSA-C22.2 No. 157-92 Locations	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous



Member of the FM Global Group

FM Approvals 1151 Boston Providence Turnpike P.O. Box 9102 Norwood, MA 02062 USA T: **781 762 4300** F: 781-762-9375 www.fmapprovals.com

## **CERTIFICATE OF COMPLIANCE**

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

**1259 06 400/5146, 1259 06 450/5146, 1259 15 400/5146, 1259 16 450/5146. Solenoid Operators.** IS / I,II,III / 1 / ABCDEFG / T5 Ta = 50°C – 1259 06 400, 1259 06 450, 1259 15 400, 1259 16 450; Entity. Entity Parameters: Vmax = 28 V Imax = 115 mA Pi = 1.6 W Ci = 0 Li = 0

**1259 50 450/5146.** Solenoid Operators. IS / I,II,III / 1 / ABCDEFG / T4 Ta = 85°C - 1259 50 450; Entity. Entity Parameters: Vmax = 28 V Imax = 115 mA Pi = 1.6 W Ci = 0 Li = 0

 EN-3198-22-XISC-44-D024.
 Solenoid Operators.

 IS / I,II,III / 1 / ABCDEFG / T4 Ta = 85°C; Entity.

 Entity Parameters:

 Vmax = 28 V
 Imax = 115 mA
 Pi = 1.6 W
 Ci = 0
 Li = 0

**Equipment Ratings:** 

Intrinsically Safe for Use in Class I, II, and III, Division 1, Group A, B, C, D, E, F, and G Hazardous (Classified) Locations in accordance with control drawings 1259 06 400, 1259 06 450, 1259 15 400, 1259 16 450, and 1259 50 450. Temperature class T4 at Ta =  $85^{\circ}$ C for model 1259 50 450/5146 and model EN-3198-22-XISC-44-D024 and T5 at Ta =  $50^{\circ}$ C for models 1259 06 400/5146, 1259 06 450/5146, 1259 15 400/5146, 1259 16 450/5146.

FM Approved for:

Nass Controls LP New Baltimore, MI 48047



This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

 Class 3600
 1998

 Class 3610
 2010

 Class 3810
 1989

 Including Supplement 1
 1995

Original Project ID: 3015004

Approval Granted: April 30, 2004

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
100514	May 25, 2010		
130131	February	12, 2013	

**FM Approvals LLC** 

rqueden J./E. Marquedant

J./E. Marquedant Group Manager, Electrical

12 February 2013 Date



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