CERTIFICATE OF COMPLIANCE

Certificate Number Report Reference Issue Date

20120510-MH13513 MH13513-20120509 2012-MAY-10

Issued to:

NASS MAGNET GMBH ECKENERSTRASSE 6 30179 HANNOVER GERMANY

This is to certify that representative samples of

COMPONENT - VALVE PARTS, ELECTRICALLY OPERATED See Addendum Page

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety:

Indicates product complies with the Standard for Electrically Operated Valves, UL 429, Sixth Edition. Indicates investigation to Canadian National Standard CAN/CSA C22.2 No. 139–10, Edition 3th.

Additional Information:

See the UL Online Certifications Directory at <u>www.ul.com/database</u> for additional information

Only those products bearing the UL Recognized Component Marks for the U.S. and Canada should be considered as being covered by UL's Recognition and Follow-Up Service and meeting the appropriate U.S. and Canadian requirements.

The UL Recognized Component Mark for the U.S. generally consists of the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products that have been produced under UL's Component Recognizion Program, UL's Recognized Component Mark: **N**, may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UL Directory preceding the recognitions or under "Markings" for the individual recognitions. The UL Recognized Component Mark for Canada consists of the UL Recognized Mark for Canada: **N** and the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory.

The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Recognized Component Mark on the product.

William R. Carney, Director, North American Certification Programs

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <u>www.ul.com/contactus</u>

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This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Valve Parts, Coil Assembly Model 8-22-5, followed by 7501, 7502, 7503, 7504, 7505, 7506, 7507, 7508, 7509, 7510, 7511, 7512, 7513, 7514, 7515, 7516, 7517, 7518, 7519, 7520, 7521, 7522, 7523, 7524, 7525, 7526, 7527.

Valve Parts, Coil Assembly Model 8-30-5, followed by7551, 7552, 7553, 7554, 7555, 7556, 7557, 7558, 7559, 7560, 7561, 7562, 7563, 7564, 7565, 7566, 7567, 7568, 7569, 7570; 7571, 7572, 7573, 7574, 7575, 7576, 7577, 7578, 7579.

Valve Parts, Coil Assembly **Model 13-30-5**, followed by 7601, 7602, 7603, 7604, 7605, 7606, 7607, 7608, **7609**, 7610, 7611, 7612, 7613, 7614, 7615, 7616, 7617, 7618; 7619, 7620, 7621, 7622, 7623, 7624, 7625, 7626

Valve Parts, Coil Assembly Model 13-36-5, followed by 7651, 7652, 7653, 7654, 7655, 7656, 7657, 7658, 7659, 7660, 7661, 7662, 7663, 7664, 7665, 7666, 7667, 7668, 7669, 7670, 7671, 7672, 7673, 7674, 7675, 7676, 7677, 7678.

Magnetspule .032-UL K05103..-UL wird über die Wicklungsnummer Magnet (7609) abgebildet.

Solenoid coil .032-UL K05103..-UL is mapped via the solenoid winding number (7609).

La bobine magnétique .032-UL K05103..-UL est représentée par le numéro d'enroulement de l'aimant (7609).

Magneetspoel .032-UL K05103 ..- UL wordt in kaart gebracht via het wikkelnummer van de magneet (7609).

La bobina .032-UL K05103..-UL se asigna a través del número de bobinado de la bobina (7609).

La bobina del solenoide .032-UL K05103..-UL è mappata tramite il numero di avvolgimento del solenoide (7609).

Катушка соленоида .032-UL K05103..-UL сопоставляется по номеру обмотки соленоида (7609).

William R. Carney, Director, North American Certification Programs

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nass magnet —

UL-File MH 13513 Volume 1 Section 5 UL 429: VALVE PARTS, ELECTRICALLY OPERATED - COMPONENT (YSYI2, YSYI8) Insulation Class 155 °C (F)

Assembly

Model 8-22-5

for nass magnet 3/2-way valves - 1000 kPa (150 psi, 10 bar)

max. 4.7W: nominal orifice size 1.0/1.3 max. 6.9W: nominal orifice size 1.3/1.5 max. 10W: nominal orifice size 1.5/1.7



Model 8-30-5

for nass magnet 3/2-way valves - 1000 kPa (150 psi, 10 bar) max. 3.1W: nominal orifice size 1.0/1.3 max. 4.5W: nominal orifice size 1.3/1.5 max. 6.5W: nominal orifice size 1.5/1.7



Model 13-30-5

for nass magnet 3/2-way valves - 1000 kPa (150 psi, 10 bar) max. 10W: nominal orifice size 2.0/2.5 max. 16W: nominal orifice size 2.5/3.0

Model 13-36-5

for nass magnet 3/2-way valves - 1000 kPa (150 psi, 10 bar) max. 16W: nominal orifice size 3.0/3.5 max. 20W: nominal orifice size 3.5/3.5



Please consult us for suitable armature assemblies, connectors and accessory parts (flange versions, thread versions – M12 – UN, nuts, mounting plates, ...).

Conditions of Acceptability

- 1. The devices shall be installed into an end-use enclosure.
- 2. The solenoids are investigated for factory wiring only.
- 3. Devices have been investigated for use within dry environment only.
- 4. The devices have only been subjected to the following test program:
 - Increased Potential Test
 - Dielectric Voltage Withstand Test

Further testing shall be performed in accordance with the end-use (valve) product standard. Temperatures of the coil windings shall be monitored by the Change-of-Resistance Method and shall not exceed 140°C [i.e., U.S. Class 155(F) limits] when mounted together with a valve-body in the end-use application.

- 5. Electrical spacings have been evaluated for use within general-purpose valve applications.
- 6. The means of securing the coils to a valve-body or armature assembly shall be evaluated in the end-product application.
- 7. The suitability of the factory wiring (secureness, spacings) and grounding of dead metal shall be determined in the end product.

Example coil marking



Model no. 8-22-5 W 7500 max. 10 W 24 V DC

nass magnet GmbH

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