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REPORT

ON

COMPONENT - SWITCHES, INDUSTRIAL CONTROL

COMUS INTERNATIONAL N V
3700 TONGEREN, BELGIUM

DESCRIPTION

PRODUCT COVERED:

USR, **CNR** – Component, Industrial Control Solid State Switch, model no. WG A5 followed by 2, 4, or 6 followed by A or D, followed by 10, 25 or 40, followed by R or Z, with or without -1 through -999.

GENERAL:

These devices are open type solid state relays, for use in a Pollution Degree 2 environment, and intended to be used in applications where the suitability of the combination has been determined by Underwriters Laboratories Inc.

ELECTRICAL RATINGS:

Input:

Control Voltage: 3-32 V dc or 90-280 V ac

Output:	Voltage:	24-280 V ac	
	Current:	max. 10 A (Suffix 10)	General Use
		max. 25 A (Suffix 25)	General Use
		max. 40 A (Suffix 40)	General Use

Note :
Devices are only suitable for use in a maximum surrounding air temperature of 40 °C.

NOMENCLATURE BREAKDOWN:

$$\frac{\text{WG A5}}{\text{I}} \quad \frac{4}{\text{II}} \quad \frac{\text{D}}{\text{III}} \quad \frac{25}{\text{IV}} \quad - \quad \frac{\text{Z}}{\text{V}} \quad - \quad \frac{123}{\text{VI}}$$

I.	Designates series designation:	- WG A5.
II.	Designates line voltage rating:	- 2-120 Vac (250 V blocking) 47/63Hz - 4-240 Vac (400 V blocking) 47/63Hz - 6-280 Vac (600 V blocking) 47/63Hz
III.	Designates control input voltage Rating.	-A : 90 to 280 V ac -D : 3 to 32 V dc
IV.	Designates load current rating	-10 : 10 A -25 : 25 A -40 : 40 A
V.	Switching	Z : Zero voltage switching. R : Random switching.
VI.	Manufacturer's identification	-1 through -999

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

CNR - Indicates investigation to Canadian National Standards C22.2 No. 14 – 95.

USR - Indicates investigation to U.S. National Standard UL 508.

Note:

CNR = Canadian National Standards – Recognized.

USR = United States Standards – Recognized.

Use - For use only in products where the acceptability of the combination is determined by Underwriters Laboratories Inc.

CONDITIONS OF ACCEPTABILITY:

1. These devices should be used within their Recognized ratings as specified above.

2. These devices should be mounted in an enclosure having adequate strength and thickness.

3. When open type devices are mounted in enclosures, it should be determined if tests need to be repeated, giving particular attention to heating tests. The device was tested on an aluminum heat sink, Part no. WG K4/160L (0.3 K/W) with an air flow of 50 m3/hours. If a different heat sink is used in the end application, consideration should be given to repeating the heating test.

   Following min. values should be required as min. value for the rated currents at a surrounding air temperature of max. 40°C:

   Part no. WG A5 x x 10 x - 5.0 K/W
   Part no. WG A5 x x 25 x - 1.3 K/W
   Part no. WG A5 x x 40 x - 0.35 K/W

   X - denotes model differences not affecting the electrical ratings.

4. The terminals are to be factory wired only and the suitability of the connection (including spacings between factory connectors) shall be determined in the end use.

5. The output wave-form of this device may not be sinusoidal under certain inductive loading conditions and the effect of this output wave on the intended equipment must be determined in the end use application.

6. The input voltage ratings are considered to be absolute minimum and maximum values.

7. Spacings at factory wiring terminals of not less than 12.7 mm (1/2 in) should be maintained between any uninsulated live part and the walls of a metal enclosure.

MARKING:

Ink-stamped on cover, mylar label, or die-stamped on metal plate, permanently secured to cover, designating:

1. Manufacturer's name,
2. Catalog number,
3. Input / output ratings,
4. **For use in a pollution degree 2 environment,**
5. **Privided with recognized component mark for USA and Canada** and
6. Suitable for a max. surrounding air temperature of 40°C.