

Certificate of Compliance

Certificate Number 20111220-E156943
Report Reference E156943-20090606
Issue Date 2011-12-20

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Issued to: SIEMENS AG
I IA CE CP R&D-VI 4
WERNER-VON-SIEMENS-STRASSE 48
92220 AMBERG, GERMANY

This is to certify that representative samples of

COMBINATION MOTOR CONTROLLERS


Open Type Self-Protected Combination Motor Controller, Cat. No. 3RV20, followed by 11 or 21, followed by -0A, -0B, -0C, -0D, -0E, -0F, -0G, -0H, -0J, -0K, -1A, -1B, -1C, -1D, -1E, -1F, -1G, -1H, -1J, -1K, -4A, -4B, -4C, -4D, -4E or -4N, followed by A or C, followed by 1 or 2, followed by 0, 1, 2, 3, 4 or 5. May be followed by additional numbers and letters for manufacturers use.

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

Standard(s) for Safety: ANSI/ UL 508, "Industrial Control Equipment" and CSA-C22.2 No. 14, "Industrial Control Equipment".

Additional Information: See UL On-line Certification Directory at WWW.UL.COM for additional information.

Only those products bearing the UL Listing Mark for the US and Canada should be considered as being covered by UL's Listing and Follow-Up Service meeting the appropriate requirements for US and Canada.

The UL Listing Mark for the US and Canada generally includes: the UL in a circle symbol with "C" and "US" identifiers:  the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product

William R. Carney
Director, North American Certification Programs

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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.

GENERAL:

These devices are open type, Type E, manual self-protected combination motor controllers. They are intended to provide motor disconnection means, motor branch circuit short circuit, motor control, and motor overload protection. These devices are suitable for use as Service Equipment, when provided with this manufacturer's adapters Models 3RV2928-1H, 3RV2925-5EB or 3RV2928-1K provided on the line side of the combination motor controllers. These devices may also be used with Siemens Listed type 3RT contactors and 3RW solid state controllers. When used, the contactors and solid state controllers have the same horsepower rating as the 3RV20 devices with which they may be used.

The 3RV20 are also evaluated together with contactor 3RT2 as Combination Motor Controllers Type F.

The devices with screw terminals are provided with line terminal adapters, cat. no. 3RV2928-1H or cat. No. 3RV2925-5EB or cat. No. 3RV2928-1K fastened onto existing line side terminal blocks of combination motor controller. The adapters may be factory or field-installed. These devices may be used with insulated busbar systems, Cat. No. 3RV1915, with the 3RV2925-5EB adapter. If used with busbar system type 8US1 line terminal adapter type 3RV2928-1K shall be used. In these applications, the incoming line terminal to the busbar systems has spacings not less than 2 in. (50.8 mm) measured over surface, and 1 inch (25.4 mm) through air.

The devices may be used with Busbar systems, Cat. No. 3RV2917. In these applications, the incoming line terminal to the busbar systems has spacings not less than 2 in. (50.8 mm) measured over surface, and 1 inch (25.4 mm) through air.

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RATINGS:

Horsepower Setting Range 0.7-1 A (-0J)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	*	*
200/208 V	*	*
230/240 V	*	*
460/480 V	-	*
575/600 V	-	1/2

Horsepower Setting Range 0.9-1.25 A (-0K)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	*	*
200/208 V	*	*
230/240 V	*	*
460/480 V	-	1/2
575/600 V	-	1/2

Horsepower Setting Range 1.1-1.6 A (-1A)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	*	*
200/208 V	*	*
230/240 V	1/10	*
460/480 V	-	3/4
575/600 V	-	3/4

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Horsepower Setting Range 1.4-2 A (-1B)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	*	*
200/208 V	*	*
230/240 V	1/8	*
460/480 V	-	3/4
575/600 V	-	1

Horsepower Setting Range 1.8-2.5 A (-1C)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V		
200/208 V	1/6	1/2
230/240 V	1/6	1/2
460/480 V	-	1
575/600 V	-	1 1/2

Horsepower Setting Range 2.2-3.2 A (-1D)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	1/10	
200/208 V	1/6	1/2
230/240 V	1/4	3/4
460/480 V	-	1 1/2
575/600 V	-	2

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Horsepower Setting Range 2.8-4 A (-1E)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	1/8	
200/208 V	1/4	3/4
230/240 V	1/3	3/4
460/480 V	-	2
575/600 V	-	3

Horsepower Setting Range 3.5-5 A (-1F)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	1/6	1/2
200/208 V	1/3	1
230/240 V	1/2	1
460/480 V	-	3
575/600 V	-	3

Horsepower Setting Range 4.5-6.3 A (-1G)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	1/4	1/2
200/208 V	1/2	1
230/240 V	1/2	1 1/2
460/480 V	-	3
575/600 V	-	5

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Horsepower Setting Range 5.5-8 A (-1H)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	1/3	3/4
200/208 V	3/4	2
230/240 V	1	2
460/480 V	-	5
575/600 V	-	5

Horsepower Setting Range 7-10 A (-1J)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	1/2	1
200/208 V	1	2
230/240 V	1 1/2	3
460/480 V	-	5
575/600 V	-	7 1/2

Horsepower Setting Range 9-12.5 A (-1K)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	1/2	1 1/2
200/208 V	1 1/2	3
230/240 V	2	3
460/480 V	-	7 1/2
575/600 V	-	10

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Horsepower Setting Range 11-16 A (-4A)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	1	2
200/208 V	2	3
230/240 V	2	5
460/480 V	-	10
575/600 V	-	-

Horsepower Setting Range 14-20 A (-4B)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	1 ½	3
200/208 V	3	5
230/240 V	3	5
460/480 V	-	10
575/600 V	-	-

Horsepower Setting Range 17-22 A (-4C)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	1 ½	3
200/208 V	3	5
230/240 V	3	7 ½
460/480 V	-	15
575/600 V	-	-

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Horsepower Setting Range 20-25 A (-4D)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	2	3
200 V	3	5
208 V	3	7 1/2
230/240 V	3	7 1/2
460/480 V	-	15
575/600 V	-	-

Horsepower Setting Range 23-28 A (-4N)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	2	3
200/208 V	3	7 1/2
230/240 V	5	10
460/480 V	-	20
575/600 V	-	-

Horsepower Setting Range 27-32 A (-4E)

<u>Voltage</u>	<u>Horsepower</u> <u>1-ph</u>	<u>Horsepower</u> <u>3-ph</u>
115/120 V	2	5
200 V	3	7 1/2
208 V	5	10
230/240 V	5	10
460/480 V	-	20
575/600 V	-	-

These devices are suitable for use on circuits capable of withstanding the following maximum short circuit currents.

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RMS Symmetrical Amperes

Voltage

30 kA	600 Y/347 V ac (up to 12.5 A-Version)
65 kA	480 Y/277 V ac (up to 25 A-Version)
50 kA	480 Y/277 V ac (28 and 32 A-Version)
65 kA	240 V ac (up to 25 A-Version)
50 kA	240 V ac (28 and 32 A-Version)

The trip rating is 125% of the dial setting (thermal range).

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NOMENCLATURE:

3RV20	21	-4A	A	1	8
I	II	III	IV	V	VI

I. Basic Type
3RV20 – Combination Motor Controller for motor protection

II. Size of terminal for main circuit
11 – Up to 16A
21 – Up to 32 A

III. Setting Ranges

Suffix	From	to (A)
-0A	0.11	0.16
-0B	0.14	0.2
-0C	0.18	0.25
-0D	0.22	0.32
-0E	0.28	0.4
-0F	0.35	0.5
-0G	0.45	0.63
-0H	0.55	0.8
-0J	0.7	1
-0K	0.9	1.25
-1A	1.1	1.6
-1B	1.4	2
-1C	1.8	2.5
-1D	2.2	3.2
-1E	2.8	4
-1F	3.5	5
-1G	4.5	6.3

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III. Setting Ranges (continued)

-1H	5.5	8
-1J	7	10
-1K	9	12.5
-4A	11	16
-4B	14	20
-4C	17	22
-4D	20	25
-4N	23	28
-4E	27	32

IV. Tripping Class

- A setting ranges with instantaneous tripping Class 10.
- C same as A but setting range fixed

V. Type of Terminals

- 1 Screw Terminal
- 2 Spring terminals

VI. Auxiliary Switches

(Combinations with certified accessories Type 3RV29)

- 0 without
- 1 1NO + 1NC, side mounted
- 2 2NO, side mounted
- 3 2NC, side mounted
- 4 1NO/NC Changeover, top mounted
- 5 1NO + 1NC, top mounted

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