File E52653 Project 99SC44399

June 09, 1999

REPORT

on

COMPONENT - CONNECTORS FOR USE IN DATA SIGNAL, CONTROL, AND POWER APPLICATIONS

Hirose Electric Co., Ltd. Yokohama, Japan

Copyright © 1999 Underwriters Laboratories Inc. Underwriters Laboratories Inc. authorizes the above named company to reproduce this Report provided it is reproduced in its entirety.

Underwriters Laboratories Inc. authorizes the above named company to reproduce that portion of this Report consisting of this Cover Page through Page 2.

File E52653 Vol. 11 Sec. 8 Page 1 Issued: 1999-06-09 and Report Revised: 2017-08-21

## PRODUCT COVERED:

 $\ensuremath{\mathsf{USR}}\xspace$  CNR Component - Connectors, Series DF1E, may be followed by alphanumeric characters.

## GENERAL:

These devices are multi-pole connectors employing contacts of the crimp termination type for use in electrical equipment where the acceptability of the combinations is determined by Underwriters Laboratories, Inc.

## ELECTRICAL RATINGS:

Connector Type	Crimp Contact Type	(AWG) Wire Size	V (ac)	(A.) Amps
Connector Type				
Pin Header: DF1E\$-%P-2.5DSA( <del>YY</del> )	-	-	30	3
*Socket:				
$DF1E-%S-2.5C(\frac{YY}{})$	DF1&-2022SC#	20	29.9	3
		22	29.9	3
	DF1&-2428SC#	24	29.9	1
		26	29.9	1
		28	29.9	1
	DF1&-30SC#	30	29.9	0.5
Plug:				
DF1E\$-%EP-2.5C(YY)	DF1&-2022PC#	20	29.9	3
		22	29.9	3
	DF1&-2428PC#	24	29.9	1
		26	29.9	1
		28	29.9	1
	DF1&-30PC#	30	29.9	0.5
Retainer:				
DF1E-%-RS/P-2.5(YY)	-	-		-

<sup>\$:</sup> A - G or Blank

Disconnecting Use Only (see Sec Gen for required marking).

<sup>%: 2 - 15</sup> 

<sup>&</sup>amp;: B or E

<sup>#:</sup> A, B, F or Blank  $(\frac{YY}{Y})$ : 01-99 or blank.

File E52653 Vol. 11 Sec. 8 Page 2 Issued: 1999-06-09 and Report Revised: 2017-08-21

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

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

Conditions of Acceptability - In order to be judged acceptable as a component of electrical equipment, the following conditions should be met.

- 1. These devices should be used only where they will not interrupt the current.
- 2. These devices have been investigated for the current carried by each pole with a maximum temperature rise of  $30^{\circ}$ C.
- 3. The adjacent poles may be used at potentials not exceeding 30 V based on Dielectric Testing at 500 Vac.
- 4. The factory assembly contacts have been investigated for the following wire ranges (and maximum tensile forces):

Part No.	Wire Range (AWG)	Tensile Force (lb)	
DF1E	20	8	
DF1E	22	8	
DF1E	24	8	
DF1E	28	6-1/2	
DF1E	30	3	

- \*5. The operating temperature of these devices should not exceed the temperature ratings of the insulating materials. These materials may be used interchangeably at a maximum temperature of  $65^{\circ}$ C.
- 6. These devices have only been evaluated on the size conductors described under Electrical Rating. Use on any other size conductor may require additional evaluation.
- 7. These devices should be used only within its electrical ratings.
- 8. These devices are not intended to have any strain on the conductors.