

File E52653  
Project 4787807221

February 7, 2017

REPORT

on

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

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## DESCRIPTION

## PRODUCT COVERED:

USR, CNR Component Connector, Series DF63SF,  
Cat. Nos. DF63SF-2P-7.92TV(zz), DF63SF-3P-3.96TV(zz) and DF63SF-3S-3.96C(zz).

## GENERAL:

These devices are multi-pole connectors intended for factory assembly on copper wire sizes as indicated in Ratings table below where the acceptability of combinations is determined by UL LLC. The devices are identified as follows:

USR indicates investigation to United States Standards, UL 1977.

CNR indicates investigation to Canadian National Standards,  
C22.2 No. 182.3.

## RATINGS:

Cat. Nos.	Contact Type	Voltage (Vac/Vdc)	Ampere, (A)	Conductor Sizes, AWG, (Cu, Str)
DF63SF-2P-7.92TV(zz)	Header Pin, Solder Type	600	15	(+)
DF63SF-3P-3.96TV(zz)		600	12	
DF63SF-3S-3.96C(zz) (When center pole isn't assembled)	Crimp Type, DF63SF-1618SCF*	600	15	16
			13	18
DF63SF-3S-3.96C(zz)		600	12	16
			10	18

(+) Mounted on printed wiring boards.

Disconnecting Use - see Sec Gen for required marking.

## NOMENCLATURE:

The Series DF63SF are designated as follows:

Example:

DF63SF	-3	P	3.96	TV	(zz)
I	II	III	IV	V	VI

I: - Basic Construction

DF63SF: Series designation

II: - Number of Poles

-2: 2 poles (Cat. No. DF63SF-2P-7.92TV(zz) only)

-3: 3 poles

III: - Connector Style

P: Pin Header

S: Socket

IV: - Contact Pitch

-3.96: 3.96 mm

-7.92: 7.92 mm (Cat. No. DF63SF-2P-7.92TV(zz) only)

V: - Terminal Style

TV: Solder type

C: Crimp type

VI: - Customer Specifications

(01) to (99) or blank: Indicating packing differences.

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

Use - For use only in or with complete equipment where the acceptability of the combination is determined by UL LLC.

Conditions of Acceptability - The following are among the considerations to be made when evaluating the device in the end-use product.

## Interruption of Current

1. These devices are not suitable for interrupting the flow of current by connecting or disconnecting the mating connector.

2. These devices have been subjected to the Temperature test with the rated currents and maximum temperature rise and recorded temperature (adjusted to 25°C ambient) values tabulated below:

Cat Nos.	Wire Size, AWG	Current, A	Maximum Temperature °C	
			Rise	Recorded Temperature
DF63SF-2P-7.92TV mating with DF63SF-3S-3.96C (When center pole isn't assembled.)	16	15	23.4	48.4
	18	13	23.1	48.1
DF63SF-3P-3.96TV mating with DF63SF-3S-3.96C	16	12	25.6	50.6
	18	10	22.7	47.7

## Insulating Materials

3. These devices employ insulating materials with properties as tabulated below at the minimum thickness employed in the connector housing, the suitability of the insulating materials based on the documented values shall be determined in the end-use application. Please note the values specified in the table when multiple materials are indicated represent the minimum values for the group of materials.

Cat. No.	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec	Max Operating Temp, °C
DF63SF-2P-7.92TV(zz) DF63SF-3P-3.96TV(zz)	A	0.42 mm	(+)	N/A (++)	N/A (++)	130 (++)	75
DF63SF-3S-3.96C(zz)	B	0.3 mm	(+)	N/A (++)	N/A (++)	130 (++)	75