CERTIFICATE OF COMPLIANCE

Certificate Number	UL-US-L52653-12-81309102-6
Report Reference	E52653-20190318
Date	15-Jul-2022
Issued to:	HIROSE ELECTRIC CO., LTD. 2-6-3 NAKAGAWA CHUOH TSUZUKI-KU YOKOHAMA-SHI, KANAGAWA 224-8540 Japan
This is to certify that representative samples of	ECBT2 - Connectors for Use in Data, Signal, Control and Power Applications - Component See Addendum Page for Product Designation(s).
	Have been evaluated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.
Standard(s) for Safety:	UL 1977, 3rd Ed., Issue Date: 2016-01-07, Revision Date: 2020-11-17
Additional Information:	See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Recognized Component Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

CERTIFICATE OF COMPLIANCE

Certificate Number UL-US-L52653-12-81309102-6
Report Reference E52653-20190318
Date 15-Jul-2022

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

Model	Category Description
PQ50W, PQ50W-50-FL-1	Connectors
PQ50W, PQ50W-50-FL-2	Connectors
PQ50W, PQ50W-50-PC-1	Connectors
PQ50W, PQ50W-50-PC-2	Connectors

Bruce Mahrenholz, Director North American Certification Program

UL LLC

CERTIFICATE OF COMPLIANCE

Certificate Number	UL-CA-2134865-3
Report Reference	E52653-20190318
Date	15-Jul-2022
Issued to:	HIROSE ELECTRIC CO., LTD. 2-6-3 NAKAGAWA CHUOH TSUZUKI-KU YOKOHAMA-SHI, KANAGAWA 224-8540 Japan
This is to certify that representative samples of	ECBT8 - Connectors for Use in Data, Signal, Control and Power Applications Certified for Canada - Component See Addendum Page for Product Designation(s). Have been evaluated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.
Standard(s) for Safety:	CSA C22.2 No. 182.3, 2nd Ed., Issue Date: 2016-07, Revision Date: 2021-5
Additional Information:	See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Recognized Component Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

CERTIFICATE OF COMPLIANCE

Certificate Number UL-CA-2134865-3
Report Reference E52653-20190318
Date 15-Jul-2022

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

Model	Category Description
PQ50W, PQ50W-50-FL-1	Connectors
PQ50W, PQ50W-50-FL-2	Connectors
PQ50W, PQ50W-50-PC-1	Connectors
PQ50W, PQ50W-50-PC-2	Connectors

Bruce Mahrenholz, Director North American Certification Program

UL LLC

File E52653
Project 4788700199

March 18, 2019

REPORT

on

COMPONENT - Connectors for Use in Data, Signal, Control and Power Applications

Hirose Electric Co Ltd
Tokyo, Japan

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component Connector,

Series PQ50W

(Plug)
Male Connector, Cat. No. PQ50W-50-PC-1
Female Connector, Cat. No. PQ50W-50-PC-2

(Receptacle)
Male Connector, Cat. No. PQ50W-50-FL-1
Female Connector, Cat. No. PQ50W-50-FL-2

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 – Products designated USR have been investigated using US requirements as noted in the Test Record.

CNR – Products designated CNR have been investigated using Canadian requirements as noted in the Test Record.

*

RATINGS:

Connector, Cat. Nos.	Contact, Part No.	Conductor Sizes, AWG, Str	Ampere (A)	Voltage (Vac/Vdc)
(Plug) PQ50W-50-PC-1 (Receptacle) PQ50W-50-FL-1	PQ50S-1618PC(#)A PQ50SA-1618PC(#)A **PQ50S2-1618PC(#)A** **PQ50SA2-1618PC(#)A**	16, 18	5	300
	PQ50S-1822PC(#)A	18	5	
	PQ50SA-1822PC(#)A	20	4	
	PQ50S2-1822PC(#)A **PQ50SA2-1822PC(#)A**	22	3	
	PQ50S-2428PC(#)A	24	2.5	
	PQ50SA-2428PC(#)A	26	2	
	PQ50S2-2428PC(#)A **PQ50SA2-2428PC(#)A**	28	1.5	
(Plug) PQ50W-50-PC-2 (Receptacle) PQ50W-50-FL-2	PQ50S-1618SC(#)A **PQ50S2-1618SC(#)A**	16, 18	5	300
	PQ50S-1822SC(#)A **PQ50S2-1822SC(#)A**	18	5	
		20	4	
		22	3	
	PQ50S-2428SC(#)A **PQ50S2-2428SC(#)A**	24	2.5	
		26	2	
		28	1.5	
Note: (#) represents F or None, indicating packaging differences.				

Disconnecting Use - see Sec Gen for required marking

NOMENCLATURE: The Series PQ50W are designated as follows:

Example: Cat. No. PQ50W-50-FL-1

PQ	50	W	-50	-FL-1
I	II	III	IV	V

I: - Series Name, PQ

II: - Wiring style
50: Crimping

III: - Connector specification
W: Water-resistant type

IV: - Shell size
-50: 50 poles shell type

V: - Connector Type
-PC-1: Plug Type, for male contact
-FL-1: Panel Mount Receptacle Type, for male contact
-PC-2: Plug Type, for female contact
-FL-2: Panel Mount Receptacle Type, for female contact

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.

Current-Carrying Capability and Current Ratings

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:

Connector, Cat Nos.	Contact, Part No.	Wire Size	Current, A	Maximum Temperature °C	
				Rise	Recorded Temperature
(Plug) PQ50W-50-PC-1 with (Receptacle) PQ50W-50-FL-2	(Plug) PQ50S-1618PCA with (Receptacle) PQ50S-1618SCA	18	5	28.3	53.3
	(Plug) PQ50S-1822PCA with (Receptacle) PQ50S-1822SCA	18	5	29.2	54.2
		20	4	29.6	54.6
		22	3	20.1	45.1
	(Plug) PQ50S-2428PCA with (Receptacle) PQ50S-2428SCA	24	2.5	29.9	54.9
		26	2	29.9	54.9
		28	1.5	28.5	53.5