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APPLICABLE STANDARD		UL, C-UL, TUV (Appendix 1)		
Rating	Operating Temperature Range	(Note 1) −40 ℃ to +105 ℃ (Included temperature rise caused by current-carrying)	Storage Temperature Range	(Note 2) −40 ℃ to +60 ℃
	Voltage	Power : (Appendix 1) Signal : AC,DC 250V	Applicable Wire	22sq(WL1,WL2,UL3832AWM)(AWG#3) (Appendix 1)
			CurrenT	Power: 100 A (200 A, max 2sec) (UL,C-UL,TUV) (Appendix 1) 125 A (Derating curve:25℃) (Appendix 2) Signal: 1 A

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
GeneraL Examination	Visually and by measuring instrument.	According to drawing.	X	X
Marking	Confirmed visually.		X	X
ELECTRICAL CHARACTEREISTICS				
Contact Resistance	Power:DC 1 A Signal:100 mA(DC OR 1000Hz)max	Power:0.3 mΩ max. Signal:60 mΩ max. (Note 3) (Assurance test iS only signal)	X	X
Insulation Resistance	250 V DC	5000 MΩ min.	X	—
Voltage Proof	Power:2000 V AC. for 1 min. Signal:650 V AC. for 1 min.	No flashover or breakdown. (Assurance test is only signal)	X	X
MECHANICAL CHARACTERISTICS				
Mating and Unmating Forces	Measured by applicable connector at a speed of 30 mm ± 3 mm/min.	Mating force : 98 N max. Unmating force : 98 N max.	X	—
Mechanical Operation	100 times insertions and extractions at speed of 600 times/hour. (Signal part:30 times insertions and extractions)	①Contact resistance change:power 0.5 mΩ max. (Note 3) signal 40 mΩ max. ②No damage. crack and looseness of parts.	X	—
Vibration	Frequency : 10 to 55 Hz, singe amplitude 0.75 mm, at 5 min/cycle, 10 cycles each in 3 axis directions. 30 cycles in total.	①No electrical discontinuity of 10 μs. ②No damage. crack and looseness of parts.	X	—
Shock	490 m/s² duration of pulse 11 ms at 3 times for 3 both axial directions.		X	—
ENVIRONMENTAL CHARACTERISTICS				
Rapid Change of Temperature	Temperature −40 → 105 ℃ Time 30 → 30 min Chamber transfer time is 2 to 3 min. Conduct 5 cycles of above cycles(mated) and exposed in the room temperature for 1 to 2 hours.	①Contact resistance change:power 0.5 mΩ max. (Note 3) signal 40 mΩ max. ②Insulation resistance : 1000 MΩ min. ③No damage.crack and looseness of parts.	X	—
Humidity Life	After exposure at temperature 40±2 ℃, humidity 90 to 95 %,for 96 h.(mated), exposed at room temperatrure for 1 to 2 hour.	①Contact resistance change:power 0.5 mΩ max. (Note 3) signal 40 mΩ max. ②Insulation resistance : 1000 MΩ min. ③No damage.crack and looseness of parts.	X	—
Heat Resistance	After exposure at temperature 105±2 ℃, humidity for 96 h(mated), exposed at room temperatrure for 1 to 2 hour.	①Contact resistance change:power 0.5 mΩ max. (Note 3) signal 40 mΩ max. ②Insulation resistance : 1000 MΩ min. ③No damage.crack and looseness of parts.	X	—

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
⚠1	1	DIS-E-00000869	TA.TORIHARA	AH.KODAMA	17.04.14

REMARK

The above standard value indicates the performance of a compatible connector incorporating the compatible connector.

Unless otherwise specified, refer to IEC 60512.

APPROVED	NM.NISHIMATSU	15.07.25
CHECKED	NM.NISHIMATSU	15.07.25
DESIGNED	WR.YAMADA	15.07.24
DRAWN	KK.UEHARA	15.06.11

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

		DRAWING NO.	ELC-128237-00-00
HRS	SPECIFICATION SHEET	PART NO.	PS3F-2RS/8S/10S
	HIROSE ELECTRIC CO., LTD.	CODE NO	CL236-1055-4-00 ⚠1 1/4

⚠1 DIS-E-00000869 Inscription changes regarding Rating Current and others.

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
Cold Resistance	After exposure at −40±3 °C, 96 h. (mated) exposed at room temperatrur for 1 to 2 hour.	①Contact resistance change:power 0.5 mΩ max. (Note 3) signal 40 mΩ max. ②Insulation resistance : 1000 MΩ min. ③No damage.crack and looseness of parts.	X	—
Corrosion Salt Mist	After exposure in 35±2°C, 5±1% salt water spray for 48±4 h(mated),washed with water,dried at normal temperature and humidity for 24 hours.	No heavy corrosion that lose function.	X	—

(Note 1) The product performance is guaranteed only in the themperture adequate people' s activities.
(Note 2) Storage temperature range shows storage condition for unused products including packing materials.
Follow the operating temperature range for storage condition after mounting. Storage period is six months UNOPENED.
(Note 3) Contact resitance of signal parts are the vale that contains GT8E connector.

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ATTACHMENT FIGURE

Appendix 1. Condition of safety standard(UL, C-UL, TUV STANDARD)

This item got approved by safety standard(UL,C-UL,TUV STANDARD)
under the condition of table 1 and table 2.
Safety standard is different up to the applied rated voltage and current
please see the table 1 and table 2.

Table 1. UL,C-UL condition

	Condition
Current voltage(AC/DC)	600V
Current rating	100A
Cable	22sq AWG#3 (*1)
Creepage distance(*2)	MIN:3.2mm
Clearance distance(*2)	MIN:3.2mm

Table 2. TUV conditon

	Condition
Current voltage(ac/dc)	1000V
Current rating	100A(cable 22sq , AWG#3 *1)
Over voltage category	Ⅲ
Pollution degree	3
Creepage distance(*2)	MIN:16mm
Clearance distance(*2)	MIN:8mm
Insulation system	Basic insulation(panel has the earth)

*1 : As screws and crimp terminal attached with power contact have an impact on the creepage distance and the clearance distance, please use recommended screws and crimp terminals. In case you use cables other than following recommended screws and contacts, please be careful that the creepage distance and the clearance distance meet the standard of UL, C-UL, TUV.

-Recommended screw : JIS B 1188 spring washer + cross recessed pan head screw with captive polished circular washer M6 X 12
-Recommended crimp terminal
Cable 22sq : JIS C 2805 R22-6

*2: The coverage of the creepage distance and the clearance distance is as follows.
-Between plus power supply contact and minus power supply contact
-Between plus crimp terminal and minus crimp terminal
-Between power contact and panel
-Between crimp terminal and panel
-Between screws (attacehd with power contact) and panel

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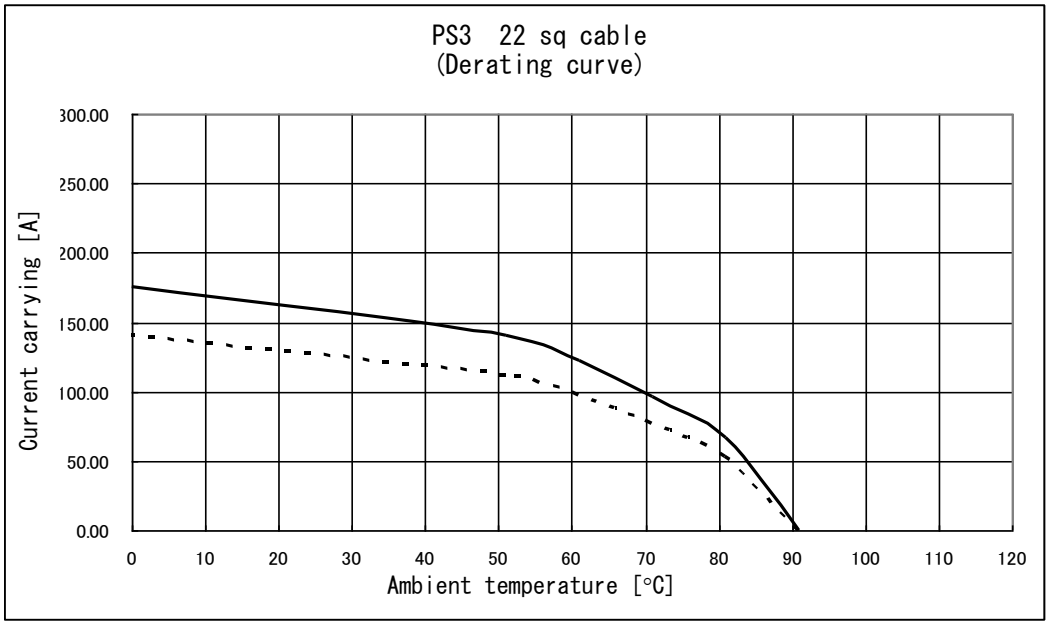
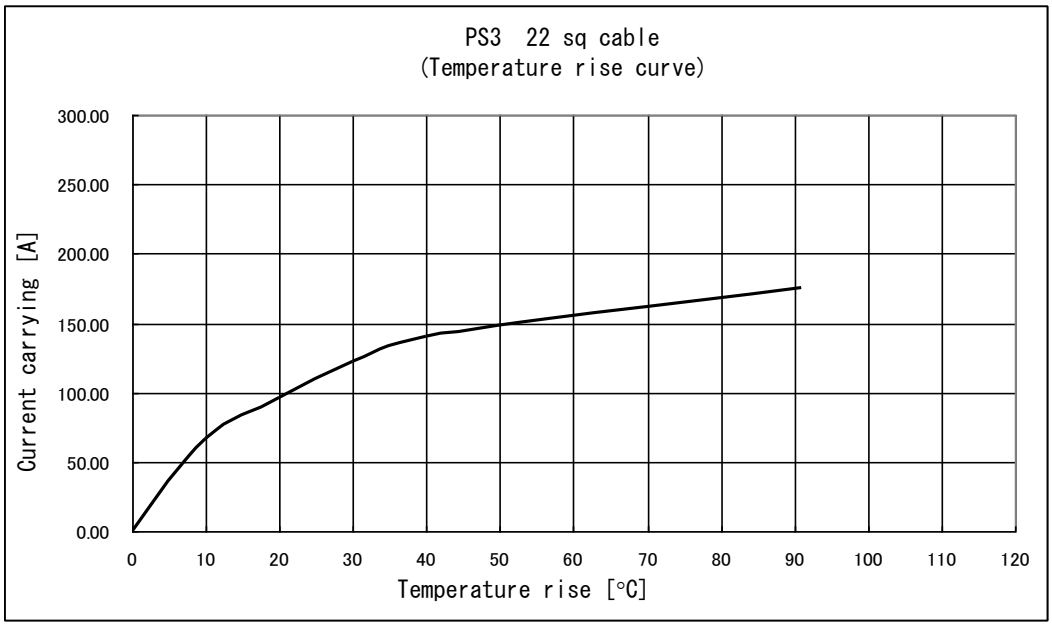
ATTACHMENT FIGURE

Appendix 2.Derating curve (reference)





1 Derating curve takes manufacturing tolerances into consideration as well as uncertainties in temperature measurement and the measuring set up and is derived from the base curve multiplied by 0.8 calculation.
2 The value of rated current differs depending on the ambient temperature. it is recommended to use the product within the derating curve zone.
3 Measurement method of derating curve is shown below.
- Test specimen:PS3-2UP as plug.
  PS3-2US as receptacle.
- Test cable spec:22 sq mm (AWG#3)
- Test condition: turn on electricity under the static state and measure.
  (Test report TR0236E-20255)