




Applicable standard					
Rating	Operating temperature range	-55°C to + 85°C(Note 1)	Storage temperature range	-10°C to + 60°C(Note 3)	
	Operating humidity range	20% to 80%(Note 2)	Storage humidity range	40% to 70% (Note 3)	
	Voltage	1000V AC/DC	Applicable connector	DF22-* (D) S-7. 92C (28) DF22#-* (D) S-7. 92C	
	Current(* 1)	AWG14 : 20A AWG16 : 15A	Applicable cable	UL1430/UL1007 AWG14, 16	
	Rated voltage	Rated current	Overvoltage category	IP-Protection method	
UL	AC 600V	AWG14:26A/AWG16:21A (At ambient temp. 25°C)	—	—	
C-UL	AC 600V	See above(*1) (Temp. rise up 30°C MAX)	—	—	
TUV	AC 600V	See above(* 1)	II	IPOO	
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	
Electric characteristics					
	Contact resistance	20mV MAX, 1mA (DC OR 1000 Hz).	5mΩ MAX.	X —	
Mechanical characteristics					
	Contact insertion and extraction forces	0.8±0.002 × 1.6±0.002 by steel gauge.	Insertion force 5.0 N MAX. Extraction force 0.3 N MIN.	X —	
	Mechanical operation	50 times insertions and extractions.	① Contact resistance: 10 mΩ MAX. ② No damage, crack or looseness of parts.	X —	
	Vibration	Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 2 h, for 3 directions.	① No electrical discontinuity of 1 μs. ② No damage, crack or looseness of parts.	X —	
	Shock	490 m/s ² duration of pulse 11 ms at 3 times for 3 directions.		X —	
Environmental characteristics					
	Rapid change of temperature	Temperature -55→ 5 to 35→+85→ 5 to 35 °C Time 30→ 5 max → 30→ 5 max min Under 5 cycles.	① Contact resistance: 10 mΩ MAX. ② No damage, crack or looseness of parts.	X —	
	Damp heat (Steady state)	Exposed at 40 ± 2 °c, 90 to 95 %, 96 h.	① Contact resistance: 10 mΩ MAX. ② No damage, crack or looseness of parts.	X —	
Remarks Note 1:Include the temperature rising by current. Note2:No condensing Note3: Apply to the condition of long term storage for unused products before harness assembly. After harness assembly, operation temperature and humidity range is applied for interim storage during transportation.					
	Count	Description of revisions	Designed	Checked	Date
					
Unless otherwise specified, refer to IEC 60512.			Approved	HS. OKAWA	20190909
			Checked	SZ. ONO	20190909
			Designed	TS. KUMAZAWA	20190909
			Drawn	TS. KUMAZAWA	20190909
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			Drawing no.		ELC-388479-00-00
	Specification sheet		Part no.	DF22-1416SCA	
	Hirose electric co., ltd.		Code no.	CL680-1190-0-00	 1/1