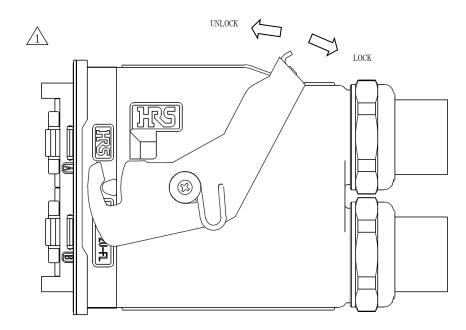
RATING     19. 0A/PIN (AWG#14)     AW       PQ50S (A) CONTACT:     Interpretation       CURRENT     12. 5A/PIN (AWG#16 UL1007)     APPLICABLE CABLE       12. 5A/PIN (AWG#18 UL1007)     OTHE	<u>2</u> -55°C TO +85 <u>—</u> WA/S-10*/34*-UNIT G#14 TO AWG#22 (ONLY 10 (UL-STYLE:UL1007, U RS #16 TO AWG#28 (UL-STYLE:UL1007)	PIN)
RATING     AC 600 V , DC 600 V (ONLY CONNECTOR) AC 300 V , DC 300 V (TUV·UL)     —       PQ50 (A) CONTACT: 19. 0A/PIN (AWG#14) PQ50S (A) CONTACT: 12. 5A/PIN (AWG#16 UL1007) 12. 5A/PIN (AWG#18 UL1007) CONDUCT SPECIFIED CURRENT TO A SINGLE PIN OF CONTACTS.     APPLICABLE CABLE •OTHE AWG       SPECIFICATIONS       ITEM     TEST METHOD		PIN)
VOLTAGE     AC 300 V , DC 300 V (TUV·UL)       RATING     PQ50 (A) CONTACT: 19. 0A/PIN (AWG#14) PQ50S (A) CONTACT: 12. 5A/PIN (AWG#16 UL1007) 12. 5A/PIN (AWG#18 UL1007) 12. 5A/PIN (AWG#18 UL1007) CONDUCT SPECIFIED CURRENT TO A SINGLE PIN OF CONTACTS.     APPLICABLE CABLE       SPECIFICATIONS       ITEM     TEST METHOD	G#14 TO AWG#22 (ONLY 10 (UL-STYLE:UL1007,U RS #16 TO AWG#28	
RATING       19. 0A/PIN (AWG#14) P050S (A) CONTACT: 12. 5A/PIN (AWG#16 UL1007) 12. 5A/PIN (AWG#18 UL1007) CONDUCT SPECIFIED CURRENT TO A SINGLE PIN OF CONTACTS.       APPLICABLE CABLE AWG       •OTHE AWG         SPECIFICATIONS         ITEM       TEST METHOD	G#14 TO AWG#22 (ONLY 10 (UL-STYLE:UL1007,U RS #16 TO AWG#28	
RATING       19. 0A/PIN (AWG#14)       AWG#14)         PQ50S (A) CONTACT:       PQ50S (A) CONTACT:       APPLICABLE CABLE         12. 5A/PIN (AWG#16 UL1007)       12. 5A/PIN (AWG#18 UL1007)       OTHE         12. 5A/PIN (AWG#18 UL1007)       CONDUCT SPECIFIED CURRENT TO       AWG         ASINGLE PIN OF CONTACTS.       SPECIFICATIONS       AWG         ITEM       TEST METHOD	G#14 TO AWG#22 (ONLY 10 (UL-STYLE:UL1007,U RS #16 TO AWG#28	
CURRENT       12. 5A/PIN (AWG#16 UL1007) 12. 5A/PIN (AWG#18 UL1007) CONDUCT SPECIFIED CURRENT TO A SINGLE PIN OF CONTACTS.       APPLICABLE CABLE AWG       •OTHE AWG         SPECIFICATIONS         ITEM       TEST METHOD	RS #16 TO AWG#28	L1015)
12. 5A/PIN (AWG#18 UL1007)     OTHE       CONDUCT SPECIFIED CURRENT TO     AWG       A SINGLE PIN OF CONTACTS.     SPECIFICATIONS       ITEM TEST METHOD REQUIRE	#16 TO AWG#28	
ITEM TEST METHOD REQUIRE		
ITEM TEST METHOD REQUIRE		
ITEM TEST METHOD REQUIRE		
	MENTS Q	T AT
GENERAL EXAMINATION VISUALLY AND BY MEASURING INSTRUMENT.	X	x x
MARKING CONFIRMED VISUALLY. ACCORDING TO DRAWING.	x	x
ELECTRICAL CHARACTERISTICS		
CONTACT RESISTANCE 100 mA (DC OR 1000 Hz) MAX.	CT SPACING) X	-
$3 > 50 \text{ m}\Omega$ MAX. (SHELL		
INSULATION RESISTANCE 500 V DC. 5000 MΩ MIN.	X	
VOLTAGE PROOF 3310 V AC. FOR 1 min. NO FLASHOVER OR BREAKDOWN.	. X	-
TEMPERATURE RISE CONDUCT SPECIFIED CURRENT TO A SINGLE PIN OF		
BELOW CONTACTS.		
PQ50 (A) CONTACT $\Leftrightarrow$ PQ50 (A) CONTACT (AWCH1A ULIO1E) (AWCH1A ULIO1E) MAX 30°C INCREASE FROM AMI	BIENT TEMPERATURE.	
(AWG#14 UL1015) (AWG#14 UL1015) (AWG#15) (AWG#16 UL1015) (URRENT CARRIED:19A/PIN	x	( -
PQ50S (A) CONTACT ↔ PQ50S (A) CONTACT		
(AWG#18 UL1007) (AWG#18 UL1007)		
CURRENT CARRIED: 12. 5A/PIN		
MECHANICAL CHARACTERISTICS		
CONTACT INSERTION AND WITHDRAWAL FORCES MEASURE WITH THE BELOW CONTACT PAIR. (1) INSERTION FORCE : 3.0 I	N MAX.	
(1) PQ50 (A) CONTACT ↔ PQ50 (A) CONTACT	X	
② PQ50S(A) CONTACT ↔ PQ50S(A) CONTACT (②INSERTION FORCE : 3.0 I WITHDRAWAL FORCE : 0.3 I		
	N MIN.	
CONNECTOR INSERTION AND MEASURE WITH THE LOOK LEVER RELEASED INSERTION FORCE : 270 N I WITHDRAWAL FORCES (ALL CONTACTS ARE ASSEMBLED) WITHDRAWAL FORCE : 34 N I		
WITHDRAWAL FORCES (ALL CUNTACTS ARE ASSEMBLED) WITHDRAWAL FORCE : 34 N I USE 2 UNITS OF PQ50WA/S-10*/34*-UNIT	MIN. X	
AND PQ50WASX-46*-UNIT.		
APPLY AXIAL PULL OUT FORCE AT THE SPEED (1) 68. 6N MIN		-
RATE OF 25mm/min TO THE TERMINAL AND MESURE (2) 29. 4N MIN		
CONTACT (LANCE)	x	( -
RETENTION FORCES (1) PQ50 (A) $-15P$ (S) CFA (AWG#14)		
(2) PQ50S (A) -1822P (S) CFA (AWG#18)		
	CHECKED D	DATE
		210325
REMARK APPROVED ABOVE SPESIFICATION SHOWS THE VALUES IN ASSEMBLED CONDITION WITH "PQ50WA" SERIES. CHECKED		160531 160531
IN CASE OF USING FOR OTHER SERIES OF CONNECTOR, THE SPECIFICATION IS BASED ON DESIGNED		160531
EACH SERIES.		
Unless otherwise specified, refer to IEC 60512.	WR. YAMADA 2016053	
	ELC-129288-00-0	)0
Note QT:Qualification Test AT:Assurance Test X:Applicable Test DRAWING NO.		
RS SPECIFICATION SHEET PART NO. PQ	50WA-2UA-PC2 2098-0-00 A	1/3

ITEM	SPECIFICA TEST METHOD	TIONS	REQUIREMENTS		AT
			REQUIREMENTS	QI	AI
ENVIRONMENTAL CHA		ETENTION			T
CONDUCTOR PRESSURE BONDING FORCES	CRIMP THE CABLE ONLY AT THE CONDUCTOR, AND R FORCE SHALL EXCEED THE SPECIFICATION WHEN PUT IS APPLIED. (DPQ50A - 15P(S)CFA (AWG#14 UL1015) (2)PQ50S(A)-1618P(S)CFA (AWG#16 UL1007) (3)PQ50S(A)-1822P(S)CFA (AWG#18 UL1007)	LL FORCE ① 2 ② 1	22.6 N MIN. 33.5 N MIN. 89.0 N MIN	x	-
	④PQ50S(A)-1822P(S)CFA (AWG#24 UL1007)	4	22.3 N MIN.		
LOCK STRENGTH	APPLY 98 N PULL FORCE FOR 1 MINUTES TO THE PLU	G IN NO	DAMAGE. CRACK AND LOOSENESS OF PARTS.	х	-
	MATING AXIAL DIRECTION WITH LOCKED CONDITION. MEASURE THE LEVER OPERATION FORCE FOR LOCK/UNL	OCK OCK	: 205.8 N MAX.	x	
LEVER OPERATION FORCE		UNLO	CK : 205.8 N MAX.	^	_
CABLE CLAMP STRENGTH	APPLY PULL FORCE OF 98 N IN MATING DIRECTIC MINUTE.		ONTACTS SHOULD BE RETAINED. O DAMAGE. CRACK AND LOOSENESS OF PARTS.	х	-
MECHANICAL OPERATION	100 TIMES INSERTIONS AND EXTRACTIONS.	3 ② N	<ul> <li>① CHANGE IN CONTACT RESISTANCE OF CONTACTS : 20 mΩ MAX.</li> <li>O DAMAGE. CRACK AND LOOSENESS OF PARTS.</li> </ul>	x	-
VIBRATION	FREQUENCY : 10 TO 55 Hz, SINGE AMPLITUDE 0.75 AT 2 h, FOR 3 DIRECTIONS. (REFERENCE FOR APPENDED FIGURE 2)	① N	O ELECTRICAL DISCONTINUITY OF 10 μs. O DAMAGE. CRACK AND LOOSENESS OF PARTS.	x	-
SHOCK	IN OPPOSITE DIRECTIONS OF EACH 6 DIMENSION AXI 3 TIMES AT 490 $m/s^2$ DURACTIONS OF PULSE 11 ms.		O ELECTRICAL DISCONTINUITY OF 10 μs. O DAMAGE. CRACK AND LOOSENESS OF PARTS.	х	-
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55 $\rightarrow$ 15 TO 35 $\rightarrow$ 105 $\rightarrow$ 15 TO 35 TIME 30 $\rightarrow$ 2 TO 3 $\rightarrow$ 30 $\rightarrow$ 2 TO 3 min. UNDER 5	CYCLES.	<ul> <li>① CHANGE IN CONTACT RESISTANCE OF CONTACTS : 20 mΩ MAX.</li> <li>0 DAMAGE. CRACK AND LOOSENESS OF PARTS.</li> </ul>	x	-
HEAT RESISTANCE	EXPOSED AT 105 °C ± 2 °C, 96 h, AND COME APPLICABLE CONNECTORS.	2 I	(1) CHANGE IN CONTACT RESISTANCE OF CONTACTS : 20 m $\Omega$ MAX. NSULATION RESISTANCE : 1000 M $\Omega$ MIN. 0 DAMAGE. CRACK AND LOOSENESS OF PARTS.	x	-
COLD RESISTANCE	EXPOSED AT -55 °C ± 3 °C, 96 h, AND COME APPLICABLE CONNECTORS.	BINE THE 2 I		x	-
HUMIDITY	EXPOSED AT 60 °C $\pm$ 2 °C, 90 TO 95 %, 96 h, AND THE APPLICABLE CONNECTORS.	(2)	<ul> <li>① CHANGE IN CONTACT RESISTANCE OF CONTACTS : 20 mΩ MAX.</li> <li>INSULATION RESISTANCE : 1000 MΩ MIN.</li> <li>(AFTER IT DRIER)</li> <li>0 DAMAGE. CRACK AND LOOSENESS OF PARTS.</li> </ul>	x	-
MIXED FLOWING GUS	EXPOSED IN SO <sub>2</sub> 10 ppm, $H_2S$ 3 ppm, 70 TO 80 %, 2 COMBINE THE APPLICABLE CONNECTORS.	4 h, AND	EAVY CORROSIN RUIN THE FUNCTION.	x	-
DUST/SPRASH PROTECTION	FOLLOW IEC60529 TESTS AND COMBINE THE APPLICAB CONNECTORS.	LE PROT NO H	(IEC60529) MIN ECTED TO AVOID DUST INTRUSION. ARMFULL EFFECT FROM DIRECT WATER SPRASH ANY DIRECTIONS.	x	-
1 THE PRODUCT PERFOR 2 INCLUDE TEMPERATUR					
Note QT:Qualification Tes	at AT:Assurance Test X:Applicable Test	DRAV	VING NO. ELC-129288	-00-00	0
	ATION SHEET	PART NC	PQ50WA-2UA-PC	2	
SPECIFIC	ATION SHEET			-	1

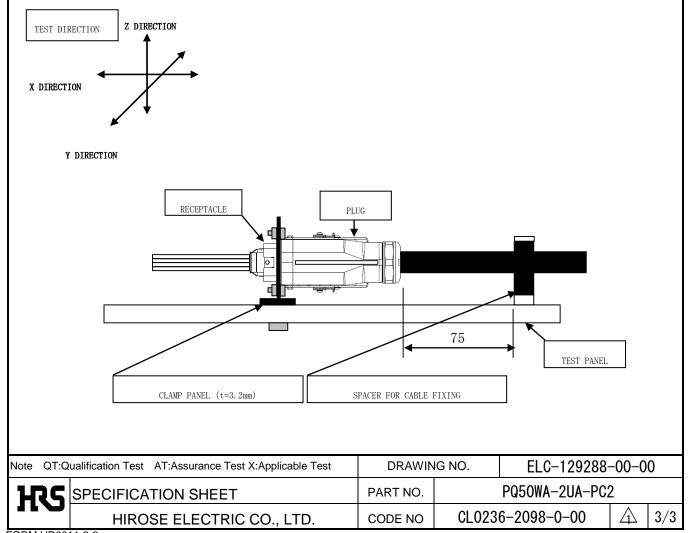
FORM HD0011-2-2

## APPENDED FIGURE





APPENDED FIGURE 2. VIBRATION TEST METHOD DIAGRAM(SIDE VIEW).



FORM HD0011-2-2