REV	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	REV	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
1	-	Revised	KYG	LHJ	21.08.23	3	9	EC(RE-2-2437)	OSW	LHJ	23.10.24
2	-	Revised	KYI	LHJ	21.12.16						

APPLICABLE STANDARD		Universal Serial Bus Type-C Cable and Connector Specification Release 2.1 Universal Serial Bus Type-C Connectors and Cable Assemblies Compliance Document Revision 2.1b
RATING	CURRENT	1.25A Max. for each power pin (A1, A4, A9, A12, B1, B4, B5, B9, B12) 0.25A for the other pins
	VOLTAGE	48V AC/DC
OPERATING CONDITION		-40℃ ~ +105℃ (INCLUDING TEMP. RISE), 95% RH max. (NON-CONDENSING)
STORAGE CONDITION		-10℃ ~ +60℃ (WITH PACKING), 15% ~ 70% RH

Para.	Test Description	Test Procedure	Test Requirement	QT	AT
1	Examination of product	EIA 364-18 Visual inspection	No physical damage.	O	O
Electrical Requirements					
2	Low Level Contact Resistance	EIA 364-23 Measure at 20mV max open circuit at 100mA (DC OR 1000Hz). 4-wire measurement is required and the resistance of PCB termination shall be deducted from the reading.	Initial : 40mΩ max for each contact After test : 50mΩ max for each contact	O	-
3	Dielectric Withstanding Voltage	EIA 364-20 Measure per Method B with unmated condition. 100V AC RMS for 1minute at sea level.	No disruptive discharge.	O	-
4	Insulation Resistance	EIA 364-21 500V DC with unmated and mated condition.	100MΩ min.	O	-
Mechanical Requirements					
5	Insertion force	EIA 364-13 Measure at 12.5mm/minute min.	Initial & After test : 5N ~ 20N (with virgin plug)	O	-
6	Extraction force	EIA 364-13 Measure at 12.5mm/minute min.	Initial : 8N ~ 20N After test : 6N ~ 20N (with virgin plug)	O	-
7	Durability	EIA 364-09 Mated 10,000 times Mechanically operated : 500cycles/hr Mating stroke : 2.75mm Insertion, extraction force shall be measured at a maximum speed of 12.5mm/min	No physical damage.	O	-
8	Air-Leak	Input air pressure : 20±5% KPa for 5sec.	Inspection leakage : 0.3% (60Pa) max.	O	-
9	Random Vibration	EIA 364-28 Test Condition VII, Test Letter D Mated specimens to 3.10 G's RMS between 20 to 500Hz 15minutes in each of 3 mutually perpendicular planes.	No physical damage. No discontinuity of 1us of longer duration when mated connector during test.	O	-

REMARKS	DRAFT	DESIGN	CHECK	APPROVAL	RELEASE
	Y.B.PARK 19.04.26	Y.B.PARK 19.04.26	H.J.LEE 19.04.26	H.J.LEE 19.04.26	DEPT 23.10.24 ENG

NOTE) QT : QUALIFICATION TEST, AT : ASSURANCE TEST, O : Applicable Test

DWG NO	CL NO	PART NO
ELC4-632671	CL 6240-0022-9	CX90MWD2G-24P

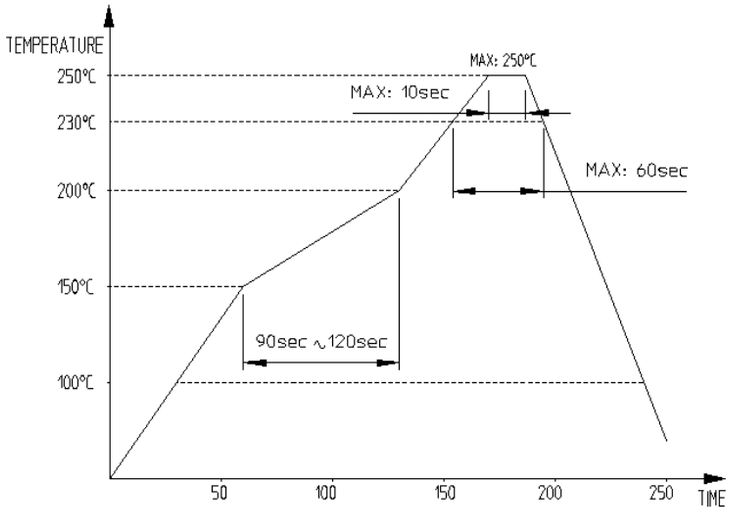
HRS HIROSE KOREA.CO.,LTD	PRODUCT SPECIFICATION	1 / 3

Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

Para.	Test Description	Test Procedure	Test Requirement	QT	AT
Environmental Requirements					
10	Temperature Life	EIA 364-17, Method A 105℃ without applied voltage for 120hours.	No physical damage.	O	–
11	Cyclic Temperature and Humidity	EIA 364-31 25±3°C at 80±3% RH for 1hour. 65±3°C at 50±3% RH for 1hour. Thermal ramp : 0.5hour Number of cycles : 24cycles	No physical damage.	O	–
12	Thermal Shock	EIA 364-32, Test Condition I 10cycles -55°C and +105°C	No physical damage.	O	–
13	Solderability	EIA 364-52 Dwell in 245±5℃ of the solder bath for 5sec.	Solder coverage shall be 95% min. of the immersed surfaces.	O	–
14	Salt Spray	EIA 364-26 5% of NaCl in 35℃ for 48hours.	No corrosions that affect to the connector operation.	O	–
15	③ Co-Planarity	Measure Co-planarity of each contact lead.	0.08 Max before reflow. 0.10 Max after reflow 2times.	O	–
16	③ High Temperature and Humidity	EIA-364-31 High-temperature 85℃/85% RH for 120 hours.	No physical damage. No change to performance.	O	–
17	③ IPX8	IEC 60529 Immersion in the water at the depth of 1.5m for 30min.	No water penetration.	O	–
18	③ IP6X	IEC 60529 Duration : 8hours at least. Amount of talcum powder of the test chamber : 2 kg/m^3 Dust type : Talcum Powder (less than 75㎛)	No ingress of dust	O	–
19	Reflow test	Reflow profile [Fig.1] Peak 250°C max for 10sec 2times.	No deformation of mold No shape of blister and popcorn	O	–

REMARKS



[Fig.1] REFLOW TEMPERATURE

NOTE) QT : QUALIFICATION TEST, AT : ASSURANCE TEST, O : Applicable Test

DWG NO	CL NO	PART NO
ELC4-632671	CL 6240-0022-9	CX90MWD2G-24P

Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

Qualification Test Sequence Table												
Para.	Test Description	A	B	C	D	E	F	G	H	I	J	K
1	Examination of Product	1	1	1	1	1	1	1	1	1	1	1,9
2	Low Level Contact Resistance			3,5	3,11	3,5	3,5	3,5		3,5		3,8
3	Dielectric Withstanding Voltage				4,12							
4	Insulation Resistance				5,13							
5	Insertion Force				6,9							
6	Extraction Force				7,10							
7	Durability				8							4
8	Air-leak	3										
9	Random Vibration			4								
10	Temperature Life					4						
11	Cyclic Temperature and Humidity						4					
12	Thermal Shock							4				5
13	Solderability								2			
14	Salt Spray									4		
15	③ Co-Planarity										3	
16	③ High Temperature and Humidity											6
17	③ IPX8		3									
18	③ IP6X											7
19	③ Reflow Test	2	2	2	2	2	2	2		2	2	2

Remarks
1) Numbers in the table above indicate the sequence corresponding to each test group.

NOTE) QT : QUALIFICATION TEST, AT : ASSURANCE TEST, O : Applicable Test

DWG NO	CL NO	PART NO
ELC4-632671	CL 6240-0022-9	CX90MWD2G-24P