



Test Report: DTP-20X-U

DALI-2 Touch Panel (Push Button)

■ DESIGN VERIFY TEST

Input Function Test
Control Function Test
Component Stress Test

■ SAFETY & E.M.C. TEST

Safety Test
E.M.C. Test

■ RELIABILITY TEST

ENVIRONMENT TEST

■ DESIGN VERIFY TEST

INPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	INPUT VOLTAGE	9.5VDC~22.5VDC	I/P:9.5VDC~22.5 VDC Ta:25°C	TEST: OK
2	CURRENT CONSUMPTION	< 4mA	I/P : 22.5VDC I/P : 9.5 VDC Ta : 25°C	I =3.1mA/ 22.5VDC I =3.3mA/ 9.5VDC

CONTROL FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	DALI STANDARD	IEC62386-101、103、301、332	I/P : TESTING Ta : 25°C	TEST: OK
2	BUTTON EVENT	Short click, Double click, Long press	I/P : 16 VDC Ta : 25°C	TEST: OK
3	BACKLIGHT	Three adjustable levels: high brightness, low brightness, and of	I/P : 16 VDC Ta : 25°C	TEST: OK
4	VOLUME	Optional to turn on or off	I/P : 16 VDC Ta : 25°C	TEST: OK

COMPONENT STRESS TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT												
1	Transistor	Q3 Rated: 60V/3A	I/P: High-Line =22.5VDC O/P: (1)DAIL POWER ON/OFF (2) DAIL POWER CONTINUE Ta:25°C	(1)22.3V (2)21.9V												
2	Control IC Voltage Test	AUX IC U6 Rated -0.3V~44V MCU IC U5 Rated 1.7V~3.6 V	I/P: High-Line =22.5VDC O/P: (1)DAIL POWER ON/OFF (2) DAIL POWER CONTINUE Ta:25°C	U6 (1) 20.6V (2) 20.7V U5 <table><tr><th>TEST CONDITION</th><th>Level</th><th>Ripple</th><th>Spike</th></tr><tr><td>(1) DAIL POWER ON/OFF</td><td>3.326</td><td>0.23%</td><td>0.79%</td></tr><tr><td>(2) DAIL POWER CONTINUE</td><td>3.326</td><td>0.22%</td><td>0.82%</td></tr></table>	TEST CONDITION	Level	Ripple	Spike	(1) DAIL POWER ON/OFF	3.326	0.23%	0.79%	(2) DAIL POWER CONTINUE	3.326	0.22%	0.82%
TEST CONDITION	Level	Ripple	Spike													
(1) DAIL POWER ON/OFF	3.326	0.23%	0.79%													
(2) DAIL POWER CONTINUE	3.326	0.22%	0.82%													

■ SAFETY& E.M.C. TEST

SAFETY TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	WITHSTAND VOLTAGE	I/P-CASE: 1.5 KVAC/min	I/P-CASE: 1.8 KVAC/min	I/P-CASE: 0.062mA

E.M.C TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	CONDUCTION	EN55015	I/P : 230 VAC/50HZ O/P : FULL LOAD Ta : 25°C	PASS Test by certified Lab
2	RADIATION	EN55015	I/P : 230 VAC/50HZ O/P : FULL LOAD Ta : 25°C	PASS Test by certified Lab
3	E.S.D	EN61000-4-2 AIR : 8KV / Contact : 4KV	I/P : 230 VAC/50HZ O/P : FULL LOAD Ta : 25°C	CRITERIA A
4	Test by certified Lab & Test Report Prepare Any contradictions of the test results, please refer to the latest EMC test report			

■ RELIABILITY TEST

ENVIRONMENT TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT																								
1	TEMPERATURE RISE TEST	MODEL : DTP-206-U 1. ROOM AMBIENT BURN-IN : 2 HRS I/P : 230VAC O/P : FULL LOAD Ta=33.7 °C 2. HIGH AMBIENT BURN-IN : 2 HRS I/P : 230VAC O/P : FULL LOAD Ta=56.4 °C <table><tr><th>NO</th><th>Position</th><th>ROOM AMBIENT Ta=33.7 °C</th><th>HIGH AMBIENT Ta=56.4 °C</th></tr><tr><td>1</td><td>U5</td><td>32.9°C</td><td>58.1°C</td></tr><tr><td>2</td><td>Q1</td><td>32.8°C</td><td>57.8°C</td></tr><tr><td>3</td><td>Q3</td><td>32.9°C</td><td>58.1°C</td></tr><tr><td>4</td><td>U3</td><td>32.7°C</td><td>57.7°C</td></tr><tr><td>5</td><td>U6</td><td>32.7°C</td><td>57.7°C</td></tr></table>			NO	Position	ROOM AMBIENT Ta=33.7 °C	HIGH AMBIENT Ta=56.4 °C	1	U5	32.9°C	58.1°C	2	Q1	32.8°C	57.8°C	3	Q3	32.9°C	58.1°C	4	U3	32.7°C	57.7°C	5	U6	32.7°C	57.7°C
NO	Position	ROOM AMBIENT Ta=33.7 °C	HIGH AMBIENT Ta=56.4 °C																									
1	U5	32.9°C	58.1°C																									
2	Q1	32.8°C	57.8°C																									
3	Q3	32.9°C	58.1°C																									
4	U3	32.7°C	57.7°C																									
5	U6	32.7°C	57.7°C																									
2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOUR	I/P : 22.5VDC/9.5VDC O/P : 100 % LOAD Ta=-25 °C	TEST : OK																								
3	HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST	AFTER 12 HOURS IN CHAMBER ON CONTROL 50 °C/95 %R.H NO DAMAGE	I/P : 22.5 VDC O/P : FULL LOAD Ta=50 °C HUMIDITY= 95 %R.H	TEST : OK																								
4	STORAGE TEMPERATURE TEST	-25~70°C	1. Thermal shock Temperature : -30°C~ +75°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 10 CYCLE 5. Input/output condition : STATIC																									
5	CAPACITOR LIFE CYCLE	SUPPOSE C10 IS THE MOST CRITICAL COMPONENT (1) I/P : 22.5VDC O/P : FULL LOAD Ta=50 °C LIFE TIME		(1) 77172HRS																								
6	Ongoing Reliability Test	I/P : 22.5VDC O/P : FULL LOAD TA=50°C Demonstration Mean Time Between Failure : 50,000 hours																										

TEST RESULT	TESTER	REVIEW	APPROVAL
PASS	WUWQIN/ZHOUBIAO	WENF	WUWQ

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