WIRE ID	COLOR	STRANDING	CONDUCTOR DIAMETER	INSULATION MATERIAL	PRIMARY INSULATION THICKNESS	SECONDARY INSULATION THICKNESS	OVERALL WIRE OD
1	YELLOW	22AWG, 7/30	.762MM	PVC	0.4MM	0.13MM	1.83MM
2	BLUE	22AWG, 7/30	.762MM	PVC	0.4MM	0.13MM	1.83MM
3	WHITE	22AWG, 7/30	.762MM	PVC	0.4MM	0.13MM	1.83MM
4	ORANGE	22AWG, 7/30	.762MM	PVC	0.4MM	0.13MM	1.83MM
5	BROWN	22AWG, 7/30	.762MM	PVC	0.4MM	0.13MM	1.83MM

SPECIAL NOTES:

A: TWISTED PAIR DETAIL:
- THE PVC TWISTED PAIR SHALL BE WRAPPED IN AN ALUMINUM/MYLAR SHIELD WITH THE FOIL SIDE FACING INWARD
- THE DRAIN WIRE SHALL BE 22AWG TINNED COPPER

B: LAY LENGTH
- THE MANUFACTURER SHALL DETERMINE LAY LENGTHS FOR ALL WIRES THAT PREVENT BACKTWIST IN THE CABLE ASSEMBLY
- THE LAY LENGTHS SHALL NEITHER PRODUCE CONVOLUTIONS NOR JEOPARDIZE WIRE STRAIGHTNESS

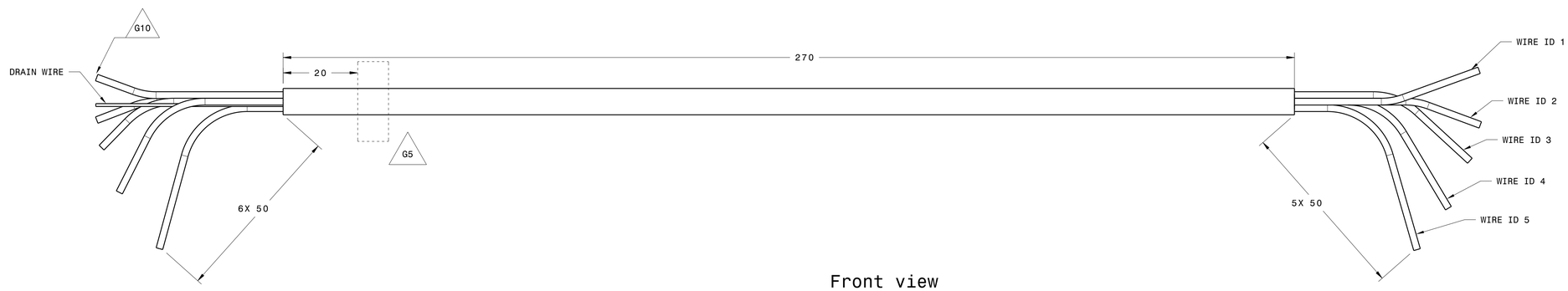
C: LV BUNDLE
- THE LV BUNDLE SHALL HOUSE ALL 22AWG CONDUCTORS
- THE LV BUNDLE JACKET SHALL BE MADE FROM PVC
- THE NOMINAL THICKNESS OF THE JACKET SHALL BE 0.4MM

D: CABLE FILLER:
- THE CABLE BODY SHALL BE FILLED TO ACHIEVE A ROUND SHAPE
- THE FILLER SHALL BE MADE FROM A NON-HYGROSCOPIC POLYPROPYLENE

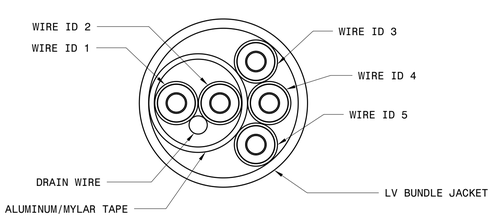
E: PERFORMANCE:
- TEMPERATURE RANGE: -40C TO 90C
- MAX OPERATING VOLTAGE: 600V
- 90C WET/DRY

F: COMPLIANCE:
- NEC NFPA 70, CE, UL, cUL/CSA COMPLIANT FOR THE FOLLOWING CHARACTERISTICS
  - VOLTAGE
  - INSULATION THICKNESS
  - WIRE COLOR
  - FLAMMABILITY
  - OUTDOOR ENVIRONMENTAL PROTECTION
- ROHS COMPLIANT

ALL BUNDLING JACKETS
SHALL BE STRIPPED BACK TO
EXPOSE THE INDIVIDUAL WIRES



Front view
Scale: 3:2



Cable Section Cut
Scale: 8:1

Project: PW2.0

DATE	REV	DESCRIPTION	DRN	APPD
07-FEB-17	01	INITIAL RELEASE	SM	

Table 11-1 Cable Length Measurement Tolerance

Cable Length Tolerance			
Metric		English	
≤0.3 m	+25 mm -0 mm	≤1 ft	+1 in -0 in
>0.3 m - 1.5 m	+50 mm -0 mm	>1 ft - 5 ft	+2 in -0 in
>1.5 m - 3 m	+100 mm -0 mm	>5 ft - 10 ft	+4 in -0 in
>3 m - 7.5 m	+150 mm -0 mm	>10 ft - 25 ft	+6 in -0 in
>7.5 m	+5% -0%	>25 ft	+5% -0%

REGULATORY COMPLIANCES

R1. ALL MATERIALS AND COATINGS MUST COMPLY WITH ALL APPLICABLE INTERNATIONAL ENVIRONMENTAL RELATED REGULATIONS, INCLUDING BUT NOT LIMITED TO EU DIRECTIVES WEEE, ELV, RRR, RoHS, REACH AND BATTERY DIRECTIVE 2006/66/EC, WHICH ARE DESCRIBED IN DETAIL AT THE GADSL LIST IN ITS LATEST VERSION AT THE TIME OF USE (http://www.gadsl.org). REFER TO TESLA SPEC 0004 BMS-0000147 FOR DETAIL.
R2. THIS COMPONENT HAS BEEN DESIGNED TO COMPLY WITH A REGULATORY REQUIREMENT. CONTACT TESLA TYPE APPROVAL BEFORE UNDERTAKING DESIGN MODIFICATIONS. A COMPONENT WHICH EMBODIES DESIGN MODIFICATIONS MAY NOT ALL OR PARTIALLY SUBMITTED BULK COMPLY WITH REGULATORY REQUIREMENTS.
R3. FOR A COMPREHENSIVE LIST OF ALL SUPPLIER QUALITY ASSURANCE REQUIREMENTS, REFERENCE THE SUPPLIER HANDBOOK BMS-0000051.

GENERAL NOTES

G1. THE MASTER SOURCE OF INFORMATION FOR THIS DOCUMENT IS A COMPUTER DATABASE. FOR BILL OF MATERIALS, REFER TO ITEM IN TESLA MOTORS PLM TOOL. THE ITEM LIST PROVIDED ON THIS DRAWING IS FOR REFERENCE ONLY.
G2. 3D CAD DATA SUPPLIED IS TO BE USED TO PRODUCE PRODUCTION TOOLING AND FOR INSPECTION.
G3. PRINTED DOCUMENT IS UNCONTROLLED - DOCUMENT OBSOLETE WHEN PRINTED.
G4. HARNESS TO BE FULLY CHECKED ELECTRICALLY FOR CONTINUITY AND INTEGRITY
G5. THIS ASSEMBLY SHALL COMPLY WITH GRADE "C" BATCH TRACEABILITY REQUIREMENTS PER TESLA MOTORS SPECIFICATION BMS-0000051.
G6. LABELING: PART TO BE LABELED IN LOCATION SPECIFIED PER DOC # BMS-0000007 AND DOCUMENT BMS-0000002 USING PSA LABEL.
G7. THIS COMPONENT MUST BE PACKAGED IN ACCORDANCE WITH TESLA MOTORS SPECIFICATION BMS-0000005, PACK CODE 136.
G8. TOOLING CONSTRUCTED TO FABRICATE THIS COMPONENT SHALL BE PROPERTY OF TESLA MOTORS INC. AND SHALL BE PERMANENTLY MARKED WITH "TESLA MOTORS INC.", TOOLING PART NUMBER AND DATE.
G9. ALL WIRE INSULATION SHALL BE SCORED AROUND THE DIAMETER 12MM BACK FROM THE TERMINATION. THE SCORED JACKET SHALL REMAIN ON THE WIRE TO PROTECT THE CONDUCTORS DURING SHIPPING.

DIMENSIONAL NOTES

D1. INTERPRET SPECIFICATIONS PER GEOMETRIC DIMENSIONING & TOLERANCING ASME Y14.5-2009
D2. CAD UNITS ARE MILLIMETERS AT 1:1.
D3. DIMENSIONS APPLY AFTER FINISHING OPERATIONS.
D4. HARDCOPY IS NOT TO SCALE. DO NOT SCALE IMAGES.
D5. ALL DIMENSIONS AND WIRE LENGTHS RELATING TO CONNECTORS TO BE MEASURED FROM BACK FACE OF CONNECTOR UNLESS OTHERWISE SPECIFIED.
D6. DIMENSIONS ON THIS DRAWING SUPERSEDE WIRE LENGTHS SPECIFIED IN ANY OTHER DOCUMENT PERTAINING TO THIS PART.
D7. UNLESS OTHERWISE NOTED, DIMENSIONS SHOWN IN THIS DRAWING SHALL BE TOLERANCED ACCORDING TO TABLE 11-1 FROM IPC/WHMA-A-620 SEEN ABOVE.

MATERIAL SPECIFICATIONS

M1. MATERIAL: N/A
M2. FINISH: N/A
M3. MANUFACTURING PROCESS: CRIMPED FABRICATION
M4. WORKMANSHIP STANDARD PER IPC/WHMA-A-620 CLASS 3.
M5. ALL PARTS IN THIS ASSEMBLY ARE SPECIFIED BY A BILL OF MATERIALS, AND MUST BE SUPPLIED PER THE MANUFACTURER PART NUMBERS INDICATED IN THE BILL OF MATERIALS. PARTS IN THE BOM MAY BE SUBSTITUTED WITH THE SAME PARTS FROM THE SAME MANUFACTURER WHOSE PART NUMBERS INDICATE NO CHANGE IN FORM, FIT OR FUNCTION. SUBSTITUTIONS.
M6. ANY CHANGE OF MATERIALS, DESIGN, PACKAGING, TOOLING AND PROCESS (INCLUDING ANY PROCESS CHEMICALS) REQUIRES TESLA MOTORS ENGINEERING EVALUATION AND WRITTEN APPROVAL PRIOR TO IMPLEMENTATION.

CAD FILE NAME	CAD FILE VERSION
1118285-00-A	01

DRAWN BY	S.MARKUS	DATE	05-JAN-17

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THE INFORMATION CONTAINED HEREIN IS DEEMED TO BE CONFIDENTIAL, PROPRIETARY, AND A TRADE SECRET OF TESLA MOTORS. THIS INFORMATION MAY NOT BE USED, REPRODUCED, OR DISCLOSED AS THE DIRECT OR INDIRECT BASIS FOR THE DEVELOPMENT, MANUFACTURE, OR SALE OF PROCESSES OR PRODUCTS WITHOUT THE EXPRESSED WRITTEN CONSENT OF TESLA MOTORS.

MATERIAL
N/A

FINISH	EST. MASS (g)
N/A	--

THIRD ANGLE PROJECTION	DIMENSIONS ARE IN MILLIMETERS. ANGLES ARE IN DEGREES.	SCALE	SHEET SIZE
		--	D

ITEM NAME
HRNS,DAISYCHAIN,LV,PW2.0

ITEM NUMBER	REVISION	SHEET
1118285-00-A	01	1 OF 1

D_HRNS,DAISYCHAIN,LV,PW2.0 | REV 01 | PDM VERSION 01.15