

INCH-POUND

MIL-DTL-29183/5C
13 March 2003
SUPERSEDING
MIL-P-29183/5B
18 JUNE 1990

DETAIL SPECIFICATION SHEET

PANELBOARD, POWER DISTRIBUTION,
PORTABLE, WEATHERPROOF, TYPE II, CLASS 1,
CONFIGURATION 2: 150 KILOWATT, 30 KVA TRANSFORMER

Inactive for new design after 13 March 2003

This specification is approved for use by all departments and agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of MIL-DTL-29183 listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation.

REQUIREMENTS: The distribution panel shall be as specified herein and in accordance with figure 1, and tables I and II.

Physical:

Weight: The weight shall not exceed 925 pounds (420 kilograms).

Dimensions (maximum):

Length: 57.5 inches (1461 millimeters (mm))

Width: 32.5 inches (826 mm)

Height: 36.5 inches (927 mm)

Paralleling cable access panel: Required (see MIL-DTL-29183).

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Stability: The vertical center of gravity shall be not more than 17.0 inches (432 mm) above level ground. Additional stability requirements shall apply in accordance with MIL-DTL-29183.

Electrical:

Input: The input to the distribution panel shall be 480 volt (V) or 208 V, 3-phase (ø), 4-pole (P), 5-wire (W), 60 Hertz (Hz).

Bus capacity: The bus bar capacities shall be 400 amperes (A) and 200 A (see figure 1).

Transformer: The transformer shall be 3-phase, 30 kilovolt-ampere (kva), dry type with a primary to secondary voltage of 480 to 208 V. Three 10 kva 1-phase transformers may be used in place of a single 3-phase transformer. The transformer(s) shall use a delta to wye (primary to secondary) configuration. The neutral of the transformer secondary shall be connected to the neutral bus bar as indicated in figure 1.

Circuit breaker: The number of poles and current rating shall be as indicated in table I herein and the voltage rating shall be sufficient for the intended circuit.

PIN: The government part identification number (PIN) is as follows:

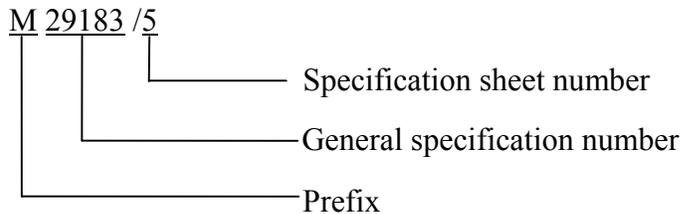


TABLE I. Circuit characteristics.

Quantity	Circuit kind	Circuit breaker Pole (P) - Ampere (A)	Interface connector ¹
1	480V, 3-phase, 5W	3P-225A	Terminals
1	480V, 3-phase, 4W	3P-225A	Terminals
3	480V, 3-phase, 4W	3P-100A	Terminals
1	480V, 3-phase, 3W	3P-40A	Transformer
1	208Y/120V, 3-phase, 5W	3P-100A	Terminals
2	208Y/120V, 1-phase, 4W	2P-50A	Terminals
4	208Y/120V, 3-phase, 5W	3P-30A	NEMA L21-30R ¹
8	120V, 1-phase, 3W	1P-20A	NEMA L5-20R ¹

¹ Connector designations are National Electrical Manufacturers Association (NEMA) type numbers. See MIL-DTL-29183.

TABLE II. Connector assignment and connector terminal wiring.

Circuit	Function	Interface connector	Phase A, black wire	Phase B, red wire	Phase C, blue wire	Neutral , white wire	Ground, green (bare) wire
1	Input, 480V, 3-phase	Pressure type, terminal block, minimum 250 kcmil ¹ wire size capacity	T1	T2	T3	T0	G
2	Output, 480V, 3-phase		L1	L2	L3	-	G
3, 4, 6	Branch, 480V, 3-phase	Pressure type, terminal block, minimal No. 1 AWG ² wire size capacity	A	B	C	-	G
3P	Paralleling, 480V, 3-phase		P1	P2	P3	P0	G

TABLE II. Connector assignment and connector terminal wiring - Continued.

Circuit	Function	Interface connector ¹	Phase A, black wire	Phase B, red wire	Phase C, blue wire	Neutral, white wire	Ground, green (bare) wire
5	Branch or alternate input, 208V, 3-phase	Pressure type, terminal block, minimum No. 1	X	Y	Z	W	G
5P	Paralleling, 208V, 3-phase	AWG ² wire size capacity	P1	P2	P3	P0	G
7	Branch, 208V, 1-phase	Pressure type, terminal block	X	Y	-	W	G
8	Branch, 208V, 1-phase		-	X	Y	W	G
9, 10, 11, 12	Branch, 208V, 3-phase	NEMA L21-30R ³	X	Y	Z	W	G
13, 14, 19, 20	Branch, 120V, 1-phase	NEMA L5-20R ³	X	-	-	W	G
15, 16	Branch, 120V, 1-phase	NEMA L5-20R ³	-	X	-	W	G
21, 22	Branch, 120V, 1-phase	NEMA 15-20R ³	-	-	X	W	G

¹ 1000 (k) circular (c) mils (mil)

² American wire gauge.

³ Connector designations are National Electrical Manufacturers Association (NEMA) type numbers. See MIL-DTL-29183.

Custodians:
Army - CR4
Navy - YD

Preparing Activity:
DLA - GS2

(Project 6110-0443-005)

Review Activities:
Navy - MC, MS

