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REPORT

On

COMPONENT - TERMINAL BLOCKS

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DESCRIPTION

PRODUCT COVERED:

Cat. No. 500, may be followed by Suffix K, II, RZ, LRZ, SKII or KUS may be followed by a one or two digit number, may be followed by 31 or 35, with or without suffix M, with or without Suffix DS, **may be followed by suffix GW or HT**, may be followed by additional suffixes.

Cat. No. 1000, with or without Suffix K, M or US, may be followed by one or digit number, with or without suffix DS, **may be followed by suffix GW or HT**, may be followed by additional suffixes.

GENERAL:

The terminal blocks are formed into multicircuit terminal strips from 2 to 12 positions which provide screw-tightening pressure wire connectors from conductor termination. They are suitable for factory or field wiring in general industrial or commercial application within the ratings specified below.

Ratings:

Cat. No.	Wire Range AWG	Maximum Ampere Rating	Maximum Voltage Gen. Ind.+/ Commercial	Torque For Field Wiring in. lb (N-m)
500, 500II	10-22	40	150/250	5 (0.57)
500DS	10-22	30	150/250	5 (0.57)
500RZ, 500K	10-22	40	300/250	5 (0.57)
500LRZ	12-22	30	300/250	5 (0.57)
500RZDS,	12-22	30	300/250	5 (0.57)
500KDS,	12-22	30	300/250	5 (0.57)
500LRZDS, 500IIDS	12-22	30	300/250	5 (0.57)
500SKII, 500SKIIMDS	12-22	30	600/600	5 (0.57)
500KUS, 500KUSDS	10-22	30	600/600	5 (0.57)
1000, 1000K	8-22	50	150/250	7 (0.8)
1000DS, 1000KDS, 1000MDS	10-22	40	150/250	7 (0.8)
1000US, 1000USDS	10-22	40	600/600	7 (0.8)
+ - May be used at 300 V application, 10 A maximum for limited ratings.				

TERMINAL BLOCK NOMENCLATURE CODE:

Example 1: $\frac{500}{1}$ $\frac{II}{2}$ $\frac{/2}{3}$ $\frac{31}{4}$ $\frac{M}{5}$ $\frac{DS}{6}$ $\frac{GW}{7}$ $\frac{XX}{8}$

1. Basic Construction -
500
2. Construction Variation -
No Suffix - Standard
K - Same as standard except provided with a 3.0 mm raised base
II - Same as standard except overall body dimensions are larger
R2 - Provided with 4.6 mm catch pins for mounting means
LR2 - Same as Suffix R2 except catch pins are 5.7 mm long
SKII - Same as Suffix II except height dimensions are larger
KUS - Same as standard except provided with a 4.3 mm raised base
3. Number of Poles -
1 or 2 digit number
4. Fixing hole diameter (Optional) -
31 - 3.1 mm
35 - 3.5 mm
5. Construction Variation
M - Center stop provided
No suffix - Center stop not provided
6. Wire Guard -
DS - Provided with a wire guard
No suffix - No wire guard provided
7. Plastic Material
GW - Glow Wire [REDACTED]
HT - High Temperature [REDACTED]
Blank - Standard [REDACTED]
8. Optional Suffixes (Commercial Purposes Only)
Additional suffixes may be provided

TERMINAL BLOCK NOMENCLATURE CODE:

Example 2: $\frac{1000}{1}$ $\frac{K}{2}$ $\frac{/2}{3}$ $\frac{DS}{4}$ $\frac{GW}{5}$ $\frac{XX}{6}$

1. Basic Construction -
1000
2. Construction Variation -
No suffix - Standard
K - Same as standard except provided with a 2.0 mm raised base
US - Same as standard except provided with a 4.0 mm raised base
3. Number of Poles -
1 or 2 digit number
4. Wire Guard -
DS - Provided with a wire guard
No suffix - No wire guard provided
5. Plastic Material
GW - Glow Wire [REDACTED]
HT - High Temperature [REDACTED]
Blank - Standard [REDACTED]
6. Optional Suffixes (Commercial Purposes Only)
Additional suffixes may be provided

ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

Use - For use only with products where the acceptability of the combination has been determined by Underwriters Laboratories Inc.

Conditions of Acceptability -

1. The mounting suitability should be determined in the end use.
2. The insulating base materials assigned max operating temperature rating.

2A. The insulating bodies are molded of Recognized Component plastic (QMF22) as specified in the following tabulation.

<u>Material Manufacturer</u>	<u>Material Designation</u>	<u>Base Material Temperature Rating, °C</u>
		105
		105 (generic)
		105 (generic)
		130
		105
		105
		120
		105 (generic)
		105 (generic)
		120

The materials above may be used interchangeably at 105°C.

3. These devices are suitable for 600 V applications if barriers, standoffs or other suitable means are used to provide acceptable spacing, 1/2 in (12.7 mm) from live parts to uninsulated grounded metal.

4. These devices may be suitable for other than commercial or general industrial use, providing spacing, insulating materials, heat rise, etc. are acceptable in the end use.

5. Terminal Blocks using grade [REDACTED] as insulating base material, shall be molded only in [REDACTED]

CONSTRUCTION DETAILS:

Spacing - The following min spacing in inches (mm) are maintained between uninsulated live parts of opposite polarity, uninsulated live parts and uninsulated grounded parts other than the enclosure or exposed metal parts.

Cat. Nos.	Max Volts	Through Air		Over Surface	
		In	(mm)	In	(mm)
Commercial Use					
All except 500SKII, 500SKIIMDS	250	3/32	(2.4) ^b	3/32	(2.4) ^b
500SKII, 500SKIIMDS, 500KUS, 500KUSDS, 1000US, 1000USDS	600	3/8	(9.5)	1/2	(12.7)
General Industrial Use					
500, 500II, 1000, 1000K, 1000DS, 1000KDS	150	1/8	(3.2) ^b	1/4	(6.4)
500K, 500RZ, 500LRZ, 500RZDS, 500KDS, 500LRZDS, 500IIDS	300	1/4	(6.4)	3/8	(9.5)
500SKII, 500SKIIMDDS, 500KUS, 500KUSDS, 1000US, 1000USDS	600	3/8	(9.5)	1/2	(12.7)
^b The spacing between wiring terminals of opposite polarity and the spacing between a wiring terminal and a grounded dead-metal part shall not be less than 1/4 in if short-circuiting or grounding of such terminals may result from projecting strands of wire.					

Marking - Company name or trademark and catalog number or type designation on device or shipping carton.

Corrosion Protection - All metal parts are of corrosion resistant material or are suitably plated or painted to resist corrosion.

Tolerance - Unless otherwise specified, all dimensions are nominal.

*CAT NO. 500 (REPRESENTS 500II) FIG. 1 (M71-9685)

General - Fig. 1 shows 12 integrally molded terminal blocks. This device may be molded into continuous strips of one or more units. This gang may be *cut to smaller gang sizes including a single terminal block. Cat. Nos. 500 and 500II are similar except for body dimensions.

*1. Body - See Ill. 1 for dimensional details for Cat. No. 500. See Ill. 1A for Cat. No. 500II.

*

2. Wire Connector - Plated copper alloy body and two plated steel or brass screws. For dimensions, see Ill. 1.

- A. CAT. NO. 500 (REPRESENTS 500SKII, 500SKIIMDS, 500KUS)
- B. CAT. NO. 500K
- C. CAT. NO. 500KDS
- D. CAT. NO. 500DS (REPRESENTS 500IIDS, 500KUSDS) - FIG. 2 (M78-12796)

General - This page serves to record an addition to this manufacturer's line of terminal blocks. Cat. No. 500 (covered on Page 3, Fig. 1) is illustrated again for comparison purposes.

Cat. No. 500SKII is similar to Cat. No. 500 (same terminals), except with a larger insulating body. See Ill. 4 for dimensions.

Cat. No. 500SKIIMDS is similar to Cat. No. 500SKII (same insulating body), except with the terminals described in Item 5 below.

Cat. No. 500IIDS employs the body described in Fig. 1, Item 1 referencing Ill. 1A, and the wire connector with wire guard described below.

Cat. No. 500KUS and 500KUSDS are similar to Cat. No. 500 and 500DS respectively (same terminals), except with a larger insulating body. See Ill. 5 for dimensions.

1. Cat. No. 500 - See Page 3, Fig. 1 for description.
2. Cat. No. 500K - Same as Cat. No. 500 except provided with approx 5/32 in high (overall) base projections.
3. Cat. No. 500KDS - Same as Cat. No. 500K except provided with wire guard, as detailed in Item 5 below.
4. Cat. No. 500DS - Same as Cat. No. 500 except provided with wire guard, as detailed in Item 5 below.
5. Wire Connector - (Cat. Nos. 500DS, 500IIDS, 500KDS, 500KUSDS). Plated copper alloy body and two plated steel or brass screws, refer to Ill. 1 for dimensions. Provided with one stainless steel pressure plate under screw base, approx 0.010 in thick, 3/32 in wide, 17/32 in long; held in position by two indents at mid-section (one on each side) of connector body, as illustrated.

- A. 500RZDS
- B. 500LRZ
(REPRESENTS 500LRZDS)
- C. 500RZ

FIG. 3 (M85-10987)

General - Cat. Nos. 500RZ, -RZDS, -LRZ, -LRZDS are intended for push in plate mounting. See Ill. 3 for mounting details. Cat. Nos. 500RZDS and 500LRZDS employ wire connectors with wire guards.

- *1. Body - One mm min material thickness. See Ill. 3 for dimensional details.

*

- 2. Wire Connector (500RZ, 500LRZ) - Same as Fig. 1, Item 2.
- 3. Wire Connectors (500RZDS, 500LRZDS) - Same as Fig. 2, Item 5.

- A. 1000DS (REPRESENTS 1000USDS)
- B. 1000K
- C. 1000KDS (REPRESENTS 1000MDS)
- D. 1000 (REPRESENTS 1000US) - FIG. 4 (M85-10989)

General - Cat. No. 1000MDS is the same as Cat. No. 1000KDS except the wire connector is provided with a center stop.

Cat. No. 1000US and 1000USDS are similar to Cat. No. 1000 and 1000DS respectively (same terminals), except with a larger insulating body. See Ill. 6 for dimensions.

1. Body - One mm min material thickness. See Ill. 2 for dimensional details.
2. Wire Connector (Cat. Nos. 1000, 1000K, 1000US) - Plated copper alloy body and two plated steel or brass screws. For dimensions, see Ill. 2.
3. Wire Connector (Cat. Nos. 1000DS, 1000KDS, 1000MDS, 1000USDS) - Same as Item 2 except provided with one stainless steel wire protector under screw base; approx 0.3 mm thick, 2.8 mm wide, 14.3 mm long; held in position by two indents at midsection (one on each side) of connector body.