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Project 98ME13395

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REPORT

on

COMPONENT - TERMINAL BLOCKS

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DESCRIPTION

PRODUCT COVERED:

Component - Terminal Blocks, Cat. Nos. DK4, DKS4 with or without Suffix Si, may be followed by O or G.

GENERAL

Cat. Nos. DK4, DKS4

These are single-circuit Terminal Blocks which incorporate cage type terminals and a solder terminal for use with stranded and solid copper conductors. Can be provided with a fuseholder.

Cat. Nos. DK4 Si, DKS4Si are fused versions of Cat. Nos. DK4, DKS4. Suffixes O and G denote open, or closed solder tag terminal, respectively.

Type Wiring - Field and factory-wiring.

<u>Cat. No.</u>	<u>Wire Range</u>		<u>Max</u> <u>Volts</u>	<u>Max</u> <u>Amp</u>	<u>Screw Torque</u> <u>In - Lbs (Nm)</u>
	<u>AWG- Cu.</u>	<u>Sol/Str.</u>			
DK4 (O,G)	20-14		600	5(1)	7 (0.79)
DKS4 (O,G)	20-14		600	5(1)	7 (0.79)
DK4Si (O,G)	20-14		32	15	7 (0.79)
DKS4Si (O,G)	20-14		32	15	7 (0.79)

(1) 15 A at 300 V, 16 A factory-wiring only.

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 Types DK4 and DK4 Si terminal blocks comply with field wiring requirements in UL 486E Standard for Equipment Wiring Terminals, Third Edition.
2. The insulating bodies are molded with polymeric materials, as specified in the following tabulation. The use of these materials shall be judged in the end-use application.

<u>Manufacturer</u>	<u>Material</u>	<u>Base Material Temperature Rating, °C</u>
		125
		130

3. The tightening torque for field wiring pressure wire connector terminals is recorded in the Ratings section of this report. The torque value shall be marked on the end-use product for those categories which require torque markings for field terminated conductors.
4. The mounting suitability shall be determined in the end-use equipment.
5. The suitability of fuses used with Cat. Nos. DK4Si, DKS4Si shall be determined in the end-use equipment.
6. Optional accessories which may be used with these terminal blocks such as test plugs, jumpers, etc. shall be evaluated in the end-use equipment.

Nomenclature - The Cat. Nos. are designated as follows:

<u>DK4</u>	<u>Si</u>	<u>G</u>
1	2	3

Mounting Variations -

DK4 - Snap-in panel mounting

DKS4 - Snap-in panel mounting, sealing tube.

Fuse Option -

Si - Fused

None - not fused

Solder Tag Terminal Option -

O - Open solder tag

G - Closed solder tag

CONSTRUCTION DETAILS:

The product shall be constructed in accordance with the following description.

Marking - The marking of a terminal block shall include:

1. The manufacturer's name or trade name on the terminal block.
2. The Type numbers which may be marked on the terminal block or shipping carton.
3. Wire range, ampere and voltage rating are optional.

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

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

	<u>Max V</u>	<u>Through Air</u>	<u>Over Surface</u>	<u>Type</u>
Commercial appliance including equipment electronic data processing equipment, etc.	250	3/32 (2.4) ^b	3/32 (2.4) ^b	All without Suffix -15.24
	600	3/8 (9.5)	1/2 (12.7)	All with Suffix -15.24 and Cat. Nos. GMVSTBR, GMVSTBW with Suffix HV
General industrial +	50	1/16 (1.6) ^b	1/16 (1.6) ^b	All without Suffix -15.24
	300	1/16 (1.6) ^b	1/8 (3.2) ^b	
	600	3/16 (4.8) ^b	3/8 (9.5) ^b	

+ - These spacings are applicable to a terminal block for use only in or with industrial control equipment where the load on any single circuit of the terminal block does not exceed 15 A at 51-150 V, 10 A at 151-300 V, 5 A at 301-600 V, or the max ampere rating for the terminal block, whichever is less.

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 (6.4 mm) if short-circuiting or grounding of such terminals may result from projecting stray strands of wire.

CAT. NOS. DK4, DKS4 WITH SUFFIXES

FIG. 1 (M98-51702)

1. Base - R/C plastic (QMFZ2), [REDACTED],
[REDACTED], or PA-6.6-[REDACTED].
Overall dimensions 23 mm by 20.9 mm by 10.5 mm minimum thickness 1.0 mm.
Provided with snap-in foot for DK4 or foot with an sealing tube for DKS 4.
2. Current Bar - Brass, tin plated, overall dimensions 24.5 mm by 5.2 mm by 2.9 mm minimum thickness 0.85 mm. Provided with open or closed solder tag.
3. Contact - Brass, tin plated, overall dimensions 8.4 mm by 4.9 mm by 5.4 mm.
4. Screw - Steel, zinc plated, yellow chromed, M3,5 by 7 mm length.

CAT. NOS. DK4 Si, DKS4Si WITH SUFFIXES

FIG. 2 (M98-51703)

1. Base - R/C plastic (QMFZ2), [REDACTED],
[REDACTED], or PA-6.6-[REDACTED].
Overall dimensions 22.0 mm by 20.5 mm by 20.6 mm minimum thickness 1.0 mm. Provided with snap-in foots or foots with a sealing tube.
2. Current Bar - Brass, tinned, overall dimensions 24.7 mm by 6.2 mm by 4.7 mm minimum thickness 0.55 mm. Provided with open or closed solder tin plated terminals and a brass tin plated part, overall dimensions 15.8 mm by 10.2 mm by 8.2 mm minimum thickness 0.55 mm.
3. Contact - Brass, tin plated, overall dimensions 8.4 mm by 4.9 mm by 5.4 mm.
4. Screw - Steel, zinc plated, yellow chromed, 3.5 by 7.0 mm length.

CONCLUSION

Samples of the product covered by this Report have been found to comply with the requirements covering the class and the products are judged to be eligible for Component Recognition and Follow-Up Service. Under the Service the manufacturer is authorized to use the Recognized Marking described in the Follow-Up Service Procedure on such products which comply with said Procedure and any other applicable requirements of Underwriters Laboratories Inc. Only those products which properly bear the Recognized Marking are considered as Recognized Components by Underwriters Laboratories Inc.

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