

File E63492  
Project 88NK21510

October 20, 1988

REPORT

on

COMPONENT - TERMINAL BLOCKS

Adels-Contact Elektrotechnische  
Bergisch Gladbach 2  
Federal Republic of Germany

Copyright © 1988 Underwriters Laboratories Inc.

Underwriters Laboratories Inc. authorizes the above named company to reproduce this Report provided it is reproduced in its entirety.

Underwriters Laboratories Inc. authorizes the above named company to reproduce that portion of this Report consisting of this Cover Page through Page 3.

## DESCRIPTION

PRODUCT COVERED:

USR - Component terminal blocks, Cat. No. RKW 14, with or without Suffix mini, with or without Suffix F, followed by Suffix O or G, followed by /1 or /2, may be followed by additional suffixes.

GENERAL CHARACTER AND USE:

The terminal blocks covered by this Report are intended for use in the following applications and within the ratings specified.

\* Application -

Usage Group B - Commercial appliances (such as business and EDP equipment, etc.

Usage Group C - General industrial (such as motor controllers, pushbutton stations, etc.

Terminal Type -Front

Pressure wire connector

BackQuick connect tabs (size  
1/4 by 0.032 in) and/or  
soldering post

\* Type Wiring - Factory and Field wiring.

## RATINGS:

Wire strip length: RKW 14 Mini = 7.0 to 7.5 mm and RKW 14 FO = 15.0 to 15.5 mm.

Series	Wire Range AWG	Wire Type	FW (#)	Torque in-lbs	Voltage V	Current A	UG	CA
RKW 14 (All suffixes)	20-12 sol/str	Cu	2	7	600	20	B,C	2(105),4
	20-10 at Quick connect tab terminals	Cu	1	--	600	20	B,C	2(105)

Note (#) - Code 1, factory wiring only, or Code 2, both factory and field wiring.

\*

CAT. NO. NOMENCLATURE CODE:

\* Example:            RKW 14    mini    F        G        2        XX  
                          A            B        C        D        E        F

A - Basic Construction

B - None - 27.0 mm housing length  
mini - 19.3 mm housing length

C - None - No quick connect tab.  
F - Quick connect tab provided.

\*                    D - **G** - Closed loop solder connection.  
                          **O** - Open solder connection.

E - /1 - 1 pole  
      /2 - 2 pole

F - Optional Suffixes (Commercial Purposes Only)

ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

**Products designated USR have been investigated using requirements contained in UL 1059, the Standard for Terminal Blocks.**

Use - For use only in or with products where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Conditions of Acceptability -

\*    1.    These terminal blocks **are provided with solder pin terminals**; the suitability of the connection, including spacings shall be determined in the end use **application**.

\*

\* 2. The insulating bodies are molded of Recognized Component plastic (QMFZ2) as specified in the following tabulation.

<u>Material Manufacturer</u>	<u>Material Designation</u>	<u>Base Material Temperature Rating, °C</u>
		105
		105 (generic)
		125
		130
		105 (generic)
		105 (generic)

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

\* 3. Reserved for future use.

\* 4. The screw terminals of this terminal block are suitable for field wiring: they have been evaluated using the Standard for Equipment Wiring Terminals For Use With Aluminum and/or Copper Conductors, UL 486E. The suitability of these terminals shall be determined in the end-use investigation.

5. The tightening torque for field wiring pressure wire connector terminals is recorded in the Ratings section of this Report. This torque value should be marked on the end-use product for those categories that require torque markings for field-terminated conductors

6. These terminal blocks may be provided with Quick connect tabs; they have not been evaluated for compliance with the dimensional and shape requirements of UL 310, the Standard for Electrical Quick-Connect Terminal. Their suitability shall be determined in the end-use applications.

## 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 trademark on the terminal block.
2. The catalog number which may be marked on the terminal block, shipping carton, or stuffer sheet placed in the shipping carton.
3. Wire range, tightening torque, 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 minimum spacings in millimeters (inches) 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.

Series	Through Air		Over Surface	
	in.	mm	in.	mm
RKW 14	3/8	9.5	1/2	12.7

\*

RKW 14

FIG. 1 (C88-05128)

General - The general design, shape, and arrangement shall be as illustrated except where variations are specifically described.

1. **Insulating Base** - 0.8 mm (0.032 in) min thick, excluding mating edges of hinged cover and body. Dimensions as noted below.

Part	Dimension, mm (in)
Single pole, width	7.4 (0.29)
Double pole, width	14.9 (0.585)
Wire entry hole	3.5 by 4 (0.14 by 0.16)
Overall height	28.4 (1.12)
Depth of quick-connect recess	11.9 (0.47)
Screw collar height	5.5 (0.22)

\*2.

**Connector Body - Tin plated brass. Dimensions: 5 by 5.5 by 8.5 mm overall, wire opening is 3.5 by 4.5 mm with concave bottom edge. Provided with minimum two full threads for clamping screw.**

- 2.1. **Clamping Screws - Plated steel. Dimensions: 8 mm long, 3 mm diameter, 16 threads per 10 mm. 1 mm wide slot in head.**

3. Quick Connect Terminal -

Material: Brass  
Plating: Tin  
Size: 6.35 mm wide by 0.81 mm thick (1/4 by 0.032 in) with 2 mm hole centered 4.5 mm from the beveled end.

4. Soldering Post -

Material: Brass  
Plating: Tin  
Thickness: 0.8 mm (0.031 in)  
Width: 5.3 mm (0.21 in)

5. Wire Contact - Not visible, formed as part of soldering post bus.

Material: Brass  
Plating: Tin  
Thickness: 0.8 mm (0.032 in)  
Length: 5.6 mm (0.22 in)  
Width: 2.9 mm (0.12 in)

Provided with five lateral serrations spaced 1 mm apart.