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Underwriters Laboratories Inc.®

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FOLLOW-UP SERVICE PROCEDURE
(TYPE R)

COMPONENT - PROTECTORS, SUPPLEMENTARY
(QVNU2)

Manufacturer: ABB STOTZ-KONTAKT GMBH
(618361-001) EPPELHEIMER STR 82
69123 HEIDELBERG 1 GERMANY

Applicant: SAME AS MANUFACTURER
(618361-001)

Recognized Company: SAME AS MANUFACTURER
(618361-001)

This Procedure authorizes the above Manufacturer to use the marking specified by Underwriters Laboratories Inc. only on products covered by this Procedure, in accordance with the applicable Follow-Up Service Agreement.

The prescribed Mark or Marking shall be used only at the above manufacturing location on such products which comply with this Procedure and any other applicable requirements.

The Procedure contains information for the use of the above named Manufacturer and representatives of Underwriters Laboratories Inc. and is not to be used for any other purpose. It is lent to the Manufacturer with the understanding that it is not to be copied, either wholly or in part, and that it will be returned to Underwriters Laboratories Inc. upon request.

This PROCEDURE, and any subsequent revisions, is the property of UNDERWRITERS LABORATORIES INC. and is not transferable.

UNDERWRITERS LABORATORIES INC.

A.W. Schaefer
Vice President and General Manager
US and Canadian Operations

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DESCRIPTION

PRODUCT COVERED:

Component supplementary protectors. Cat. Nos. S271, S272, S273 and S274 followed by Letter K, KS or Z followed by a number between .5 and 63 may be followed by additional suffixes.

Cat. Nos. S191, S192, S193, S194, S261, S262, S263 and S264 followed by Letter B, C or D (D for 260 series only); followed by a number between 6 and 40 (for Type B), between 0.5 and 63 (for Types C and D); may be followed by additional suffixes.

Cat. Nos. S201, S202, S203, and S204 followed by B followed by a number from 6 to 63 may be followed by additional suffixes.

Cat. Nos. S201, S202, S203, and S204 followed by **B**, C, D, K or Z followed by a number from 0,5 to 63 may be followed by additional suffixes. **Cat. Nos. with Suffix H01 or H02 have factory installed R/C Aux contact (S201).**

All catalog numbers may have Suffix NA.

GENERAL:

These devices are one, two, three and four pole supplementary protectors provided with thermal magnetic trip units. Devices may or may not be provided with auxiliary switches. The 1, 2 or 3 following S26 or S27 stands for the number of poles.

S190 Series is identical to the S260 Series except no provision for accessories.

S200 **B**, C and D Series is the same as S260 except for the length of the housing and the wire connectors are different.

S200 K and Z Series are identical to the S270 K and Z Series **except for the length of housing and wire terminal are different.**

Types S270-K and S270-Z are identical except for the different magnetic elements.

Series S270 -KS is identical to Series S270 -K
S260D Series use the B, C overload type and S270K series magnetic trip.
Poles with NA suffix have switch neutral pole with no trip.

RATINGS:

Current Ratings -

S260-B ratings minimum 6 A maximum 63 A
S260-C ratings minimum 0.5 A maximum 63 A
S260-D ratings minimum .5 A maximum 63 A
S270-K or Z ratings minimum 0.5 A maximum 63 A
S200-B ratings minimum 6 A maximum 63 A
S200-C, D, K and Z ratings minimum 0.5 A maximum 63 A

Voltage Ratings -

One pole devices - 277 V ac
Multipole devices - 480 V ac (2-pole breaking)

Single Wire Terminal Rating for S260 and S270 -

Wire Size (AWG)	Solid/Stranded
18-10	Solid
18-4	Stranded

Single Wire Terminal Rating for S200 -

Wire Size (AWG)	Solid/Stranded
18-10	Solid
18-6	Stranded

Multiple Wire Terminal Rating for S260, S270 and S200 -
(Terminals may have any of the combinations listed below)

Wire Size (AWG)
18/18-4
14/18-4
10/18-8
8/18-8
4/18-14

Short Circuit Ratings -

6 kA rms symmetrical 277 V ac, one pole, 480 V ac multipole
10 kA rms symmetrical 120 V ac, 60 V dc, one pole, 240 V ac, 125 V dc multipole

Additional Ratings -

Temperature -25°C to 55°C (S260)
Temperature -25°C to 55°C (S270)
* Temperature -25°C to 70°C (S200)
S270 -K is suitable for across-the-line motor starting ac and may have hp ratings as indicated under "Markings".

CONDITIONS OF ACCEPTABILITY (NOT FOR UL REPRESENTATIVE'S USE):

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

1. These devices are intended to be rail mounted.

2. The terminals of the device have been investigated for field wiring. See Ratings section.

3. These devices are not suitable for branch circuit protection.

4. Short Circuit Tests on the following types of protectors were conducted without series protection:

S270-K rated 0.5-40 A and 110 V dc or 240 V ac (multipole); or 60 V dc(1 pole)

Except Short Circuit Tests on devices rated 277 V ac (1 pole) or 480 V ac (multipole) were performed using fuses rated 4 times the ampere rating of the protector.

5. The spacings provided between adjacent terminals on multipole devices is 5 mm through air and 7.7 mm over surface. These spacings are in accordance with the Standard for Supplementary ProtectorsUL 1077, Third Edition, Table 12.1, for General Industrial use in applications involving potentials of 150 V or less. The spacings provided are suitable under the requirements of UL 840 when the devices are used in Pollution Degree 2 environments and overvoltage Category 3 or better. See "Spacings".

6. The spacings from live parts of single pole devices to adjacent metal surfaces, and from the outside poles of multipole devices to adjacent metal surface shall be evaluated in the end product application.

7. The Temperature Test for devices suitable for 25°C ambient was performed in an enclosure measuring approx 157 mm by 59 mm by 68 mm.

8. Short Circuit Tests for 10 kA rating were conducted without series protection.

9. These protectors are designed for use in ambients of -25°C to 55°C. Calibrations tests were conducted in the 25°C ambient only. Verification of trip time to published trip curve at ambients other than 25°C need to be conducted.

CONSTRUCTION DETAILS:

Spacings - For 150 V max application, the spacings of these devices have been evaluated in accordance with the requirements of the Standard for Supplementary Protectors, UL 1077, Third Edition. For over 150 V applications, the spacings have been evaluated using the Standard for Insulation Coordination Including Creepage And Clearance Distances For Electical Equipment, UL 840.

For multipole devices 5 mm through air and 7.6 mm over surface spacings are provided between adjacent terminals.

This is in accordance with UL 1077 for 150 V or less General Industrial use. The creepage distance is also considered to be in conformance with Table 6.1 of UL 840, for operating voltage of 480 V ac rms or dc, Material Group 1, and a Pollution Degree of 2 or better.

The clearance distance is also considered to be in conformance with Table 4.1 of UL 840, for end product spacing of 1/4 in or less.

Tolerances - Unless specified otherwise, all indicated dimensions are nominal.

Corrosion Protection - All parts are of corrosion resistant material or are plated or painted as corrosion protection.

Marking - Each device is marked to include the Listee's name, catalog *number. Electrical ratings are an optional marking. Terminal wire rating is also optional.

For ac rated 270-K protectors, when manufacturer elects to mark devices with horsepower ratings the following table is to be used to correlate the ampere rating, poles, and voltage of the protector with its proper horsepower marking.