

Type Approval Certificate Extension

This is to certify that Certificate No. 99/00057 (E1) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER ABB OY Low Voltage Products
Muottie 2A
65320 Vaasa
Finland

PLACE OF PRODUCTION ABB OY Low Voltage Products
Muottie 2A
65320 Vaasa
Finland

DESCRIPTION Switch Disconnectors

TYPES Switchline - OT16... to OT125...

| | | | | |
|----|---|---|---|--------------------------------|
| OT | X | X | X | No. of Poles 3 or 4 |
| | | | | F - Base and DIN-Rail Mounting |
| | | | | FT - Door Mounting |
| | | | | A - Base mounted (OT125A-) |
| | | | | AT - Door mounted (OT125AT-) |
| | | | | M - Module design |
| | | | | ML - Module design |
| | | | | Current Rating (A) |
| | | | | 16, 25, 40, 63, 80, 100, 125 |
| | | | | Switchline Type Designation |

Certificate No. 11/20003
Issue Date 15 February 2011
Expiry Date 29 April 2014
Sheet 1 of 3



Jochen Körner
Hamburg Design Support Centre
Lloyd's Register EMEA

APPLICATION

Marine, offshore and industrial applications for use in environmental categories ENV1 and ENV2 as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 - 1996

SPECIFIED STANDARDS

IEC 60947-1: 2004
IEC 60947-3: 1999

TECHNICAL DATA (SWITCH-DISCONNECTORS / LOAD BREAK SWITCHES OT)

| SIZE | | | 16 | 25 | 40 | 63 | 80 | 100 | 125 | 125A |
|---|----------------------|-------|-----|-----|-----|-----|-----|------|------|---------|
| Rated insulation voltage and operational voltage, AC 20 | V | | 750 | 750 | 750 | 750 | 750 | 750 | 750 | 750 |
| Rated impulse withstand voltage | kV | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 12 |
| Rated thermal current | I _{th} open | A | 25 | 32 | 40 | 63 | 80 | 115 | 125 | 135 |
| AC 20 | 40°C enclosed | A | 25 | 32 | 40 | 63 | 80 | 115 | 125 | 135 |
| | 60°C enclosed | A | 20 | 25 | 32 | 50 | 63 | 80 | 100 | 100 |
| Rated operational currents AC 21A | 415 V | A | 16 | 25 | 40 | 63 | 80 | 100 | 125 | 125 |
| | 500 V | A | 16 | 25 | 40 | 63 | 80 | 100 | 125 | 125 |
| | 690 V | A | 16 | 25 | 40 | 63 | 80 | 100 | 125 | 125 |
| AC 22A | 415 V | A | 16 | 25 | 40 | 63 | 80 | 100 | 125 | 125 |
| | 500 V | A | 16 | 25 | 40 | 63 | 80 | 100 | 125 | 125 |
| | 690 V | A | 16 | 25 | 40 | 63 | 80 | 100 | 125 | 125 |
| AC 23 A | 415 V | A | 16 | 20 | 23 | 45 | 75 | 80 | 90 | 105 |
| | 500 V | A | 16 | 20 | 23 | 45 | 58 | 60 | 70 | 70 |
| | 690 V | A | 10 | 11 | 12 | 20 | 20 | 40 | 50 | 50 |
| Rated voltage | U _e | V/V | 415 | 415 | 415 | 415 | 415 | 415 | 415 | 500/690 |
| Rated conditional short-circuit current | | kA/kA | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 100/50 |
| Max. allowed fuse size OFAA | | A/A | 40 | 40 | 40 | 100 | 100 | 125 | 125 | 200/200 |
| Max. allowed cut-off current peak value(k) | | A/kA | 6.5 | 6.5 | 6.5 | 13 | 13 | 16.5 | 16.5 | 30/24 |
| Rated voltage | U _e | V/V | 690 | 690 | 690 | 690 | 690 | 690 | 690 | |
| Rated conditional short-circuit current | | kA/kA | 50 | 50 | 50 | 50 | 50 | 50 | 50 | |
| Max. allowed fuse size OFAA | | A/A | 25 | 25 | 25 | 80 | 80 | 63 | 63 | |
| Max. allowed cut-off current peak value(k) | | A/kA | 4 | 4 | 4 | 11 | 11 | 10 | 10 | |
| Rated short-circuit making capacity, prospective peak value I _{cm} | | kA | 0.7 | 0.7 | 0.7 | 1.4 | 1.4 | 3.6 | 3.6 | 12 |
| Rated short time withstand current, r.m.s I _{cm} | 0.25s | kA | | | | | | | | 7 |
| | 1.0s | kA | 0.5 | 0.5 | 0.5 | 1 | 1 | 2.5 | 2.5 | 4 |

Certificate No. 11/20003
Issue Date 15 February 2011
Expiry Date 29 April 2014
Sheet 2 of 3



Jochen Körner
Hamburg Design Support Centre
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

| | | | | | | | | | | |
|-------------------------------------|-------|-----------------|---------------|---------------|---------------|--------------|--------------|-------------|-------------|-------------|
| AC breaking capacity | 415 V | A | 128 | 160 | 184 | 240 | 360 | 640 | 720 | 840 |
| pf 0.35 AC - 23A | 500 V | A | 128 | 160 | 184 | 240 | 360 | 480 | 560 | 560 |
| | 600 V | A | 80 | 88 | 96 | 160 | 160 | 320 | 400 | 400 |
| Suitable conductor cross Section | Cu | mm ² | 0.75 to 10 | 0.75 to 10 | 0.75 to 10 | 1.5 to 35 | 1.5 to 35 | 10 to 70 | 10 to 70 | 10 to 70 |

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. ETS 24354-11 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 99/00057 (E1) to which this extension should be attached.

Certificate No. 11/20003
Issue Date 15 February 2011
Expiry Date 29 April 2014
Sheet 3 of 3



Jochen Körner
Hamburg Design Support Centre
Lloyd's Register EMEA