

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

PRODUCER

ABB Oy, Medium Voltage Products

PLACE OF

P.O.Box 699, Muottitie 2A

PRODUCTION

FI -65101 Vaasa,

Finland

DESCRIPTION

630 Series - protection relays

TYPE

Feeder protection and controlREF630Motor protection and controlREM630Transformer protection and controlRET630Generator protection and controlREG630

APPLICATION

Marine applications for use in environmental categories ENV 1 and ENV 2 as defined in Lloyd's Register's Type Approval System, Test

Specification No. 1-2013.

STANDARDS

IEC60255-5: 2000 IEC60255-6: 1988 IEC60255-11: 2008 IEC60255-21-1: 1988 IEC60255-21-2: 1988 IEC60255-21-3: 1993 IEC60255-22-1: 2007 IEC60255-22-2: 2008 IEC60255-22-3: 2007 IEC60255-22-4: 2008

Certificate No.

15/20044

Issue Date

10 June 2015

Expiry Date

9 June 2020

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Hamburg Technical Support Office

Lloyd's Register EMEA

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RATINGS

STANDARDS (continues) IEC60255-22-5: 2002

IEC60255-22-6: 2001 IEC60255-22-7: 2003 IEC60255-25: 2000

IEC60255-26: 2008

IEC60255-27: 2005

Power supply

Type 600SM02 Voltages U_{aux nominal} 100,

 $\begin{array}{lll} Voltages & U_{aux \, nominal} & 100, \, 110, \, 120, \, 220, \, 240 \, \, V \, \, AC, \\ Frequency: & f_{aux \, nominal} & 50 \, and \, 60 \, Hz \end{array}$

U_{aux nominal} 48, 60, 110, 125 V DC

Type 600SM03

Voltages U_{aux nominal} 110, 125, 220, 250 V DC

Energizing inputs:

Frequency: f 50 and 60 Hz

Rated current: I_n 0.2 to 0.5A with Residual current

I_n 1 to 5A with Phase currents or residual

current

Rated voltage: U_n 100, 110, 115, 120 V AC

"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 Design Appraisal Document No. HTS/ETS 31756-15 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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