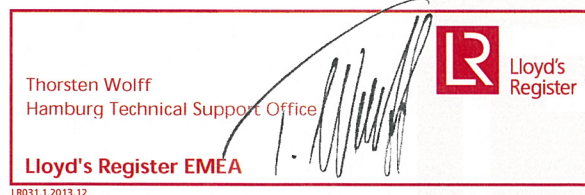


Type Approval Certificate

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 PRODUCTION	P.O.Box 699, Muottitie 2A FI -65101 Vaasa, Finland	
DESCRIPTION	615 Series Protection Relays	
TYPE	Feeder protection and control	REF615
	Motor protection and control	REM615
	Voltage protection and control	REU615
	Line differential protection and control	RED615
	Transformer protection and control	RET615
	Capacitor bank protection and control	REV615
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	IEC60255-1: 2000	
	IEC60255-5: 2000	
	IEC60255-6: 1988	
	IEC60255-11: 2008	
	IEC60255-21-1: 1988	
	IEC60255-21-2: 1988	
Certificate No.	15/20043	
Issue Date	10 June 2015	
Expiry Date	9 June 2020	
Sheet	1 of 2	



Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

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

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STANDARDS (continues)

IEC60255-21-3: 1993
IEC60255-22-1: 2007
IEC60255-22-2: 2008
IEC60255-22-4: 2008
IEC60255-22-5: 2002
IEC60255-22-6: 2005
IEC60255-23: 2008
IEC60255-25: 2000
IEC60255-26: 2009
IEC60255-27: 2005

RATINGS

Power supply

Type 1

Voltages: $U_{aux \text{ nominal}}$ 100, 110, 120, 220, 240 V AC;
48, 60, 110, 125, 220, 250 V DC
Frequency: $f_{aux \text{ nominal}}$ 50 and 60 Hz

Type 2

$U_{aux \text{ nominal}}$ 24, 30, 48, 60 V DC

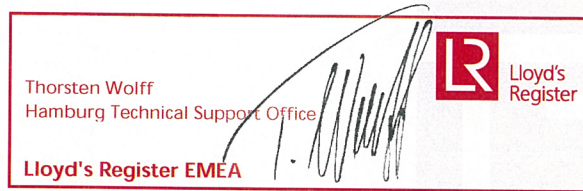
Energizing inputs

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 31757-15 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 15/20043
Issue Date 10 June 2015
Expiry Date 9 June 2020
Sheet 2 of 2



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