



LR 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 LR Type Approval System.
This certificate is issued to:

PRODUCER	LG Industrial Systems Co Ltd
PLACE OF PRODUCTION	1 Song Jung Dong Hung Duk Ku Cheong Ju City Chung Buk Republic of Korea
DESCRIPTION	Thermal Overload Relays
TYPE	Series TK, TH, GTK and GTH
APPLICATION	Marine, Offshore and Industrial applications for use in environmental categories ENV1, ENV2, ENV3 and ENV4 as defined in LR Test Specification No.1:1996. Where the test specification is satisfactory for the intended operation.
SPECIFIED STANDARD	IEC 60947-4-1
Certificate No.	98/00143
Issue Date	17 December 1998
Expiry Date	16 December 2003
Sheet	1 of 3



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Continuation

Sheet

2 of 3

Characterisation

Type	Setting range-amperes	For combination with contactor types	Maximum Voltage (ac)
TK-3N TH-3N	Various from 0.1-0.15 to 9-13	SMC-10P, -15P, CH-3	550
TK-5N TH-5N	Various from 0.1-0.15 to 16-22	SMC-20P, CH-5	550
TK-675N TH-675N	Various from 4-6 to 24-36	SMC-25P, SMC-35P, CH-6N, CH-7.5N	550
TK-1015N TH-1015N	Various from 7-11 to 45-67	SMC-48P, -50P, -65P CH-10N, -15N	550
TK-20N TH-20N	Various from 18-26 to 54-80	SMC-80P	550
GTK-100 GTH-100	Various from 34-50 to 65-100	GMC-100, GMC-125	690
GTK-150 GTH-150	Various from 85-125 to 100-150	GMC-150	690
GTK-220 ⁽¹⁾ GTH-220 ⁽¹⁾	Various from 70-100 to 140-220	GMC-180, GMC-220	690
GTK-400 ⁽¹⁾ GTH-400 ⁽¹⁾	Various from 85-125 to 260-400	GMC-300, GMC-400	690
GTK-600 ⁽¹⁾ GTH-600 ⁽¹⁾	Various from 200-300 to 520-800	GMC-600, GMC-800	690

Type TH and GTH: Non differential type

Type TK and GTK: Differential type

Note: ⁽¹⁾ Current transformer-operated relays

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Continuation

Sheet

3 of 3

"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 LR of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. [98/00143] forms a part of this Certificate.

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