



TYPE APPROVAL CERTIFICATE



N. ELE088119CS/003

This is to certify that the product below is found to be in compliance with the applicable requirements of the RINA type approval system.

Description	Contactors
Type	BF26, BF32, BF 38
Applicant	Lovato Electric S.p.A. Via Don E. Mazza, 12 24020 Gorle (BG) Italia
Manufacturer	Lovato Electric S.p.A. Via Don E. Mazza, 12 24020 Gorle (BG) Italia
Testing Standards	Rules for the Classification of Ships – Part C _ Machinery, Systems and Fire protection. Pt. C , Chap. 2, Sec. 8

Issued in Genova on April 09, 2019

This certificate is valid until April 09, 2024

RINA Services S.p.A.

Valerio Bonanni





N. ELE088119CS/003

Electromagnetic contactor type BF 26, (3P, 4P)

Rated insulation voltage	Ui	V	690
Rated thermal current	Ith	A	45
Rated frequency	-	Hz	50-60
Ambient temperature	-	°C	40
Rated operational voltage	Ue	V	230 - 400
Rated operational current	Ie	A	26
Utilization category	-	-	AC-3
Rated impulse withstand voltage	Uimp	-	6kV

Electromagnetic contactor type BF 26, (3P, 4P)

Rated insulation voltage	Ui	V	690
Rated thermal current	Ith	A	45
Rated frequency	-	Hz	50-60
Ambient temperature	-	°C	40
Rated operational voltage	Ue	V	500 - 690
Rated operational current	Ie	A	21
Utilization category	-	-	AC-3
Rated impulse withstand voltage	Uimp	-	6kV

Electromagnetic contactor type BF 32, (3P, 4P)

Rated insulation voltage	Ui	V	690
Rated thermal current	Ith	A	56
Rated frequency	-	Hz	50-60
Ambient temperature	-	°C	40
Rated operational voltage	Ue	V	230 - 400
Rated operational current	Ie	A	32
Utilization category	-	-	AC-3
Rated impulse withstand voltage	Uimp	-	6kV

Electromagnetic contactor type BF 32, (3P, 4P)

Rated insulation voltage	Ui	V	690
Rated thermal current	Ith	A	56
Rated frequency	-	Hz	50-60
Ambient temperature	-	°C	40
Rated operational voltage	Ue	V	500 - 690
Rated operational current	Ie	A	24
Utilization category	-	-	AC-3
Rated impulse withstand voltage	Uimp	-	6kV



TYPE APPROVAL CERTIFICATE



N. ELE088119CS/003

Electromagnetic contactor type BF 38, (3P, 4P)

Rated insulation voltage	Ui	V	690
Rated thermal current	Ith	A	56
Rated frequency	-	Hz	50-60
Ambient temperature	-	°C	40
Rated operational voltage	Ue	V	230 - 400
Rated operational current	Ie	A	38
Utilization category			AC-3
Rated impulse withstand voltage	Uimp	-	6kV

Electromagnetic contactor type BF 38, (3P, 4P)

Rated insulation voltage	Ui	V	690
Rated thermal current	Ith	A	56
Rated frequency	-	Hz	50-60
Ambient temperature	-	°C	40
Rated operational voltage	Ue	V	500 - 690
Rated operational current	Ie	A	24
Utilization category			AC-3
Rated impulse withstand voltage	Uimp	-	6kV

Rated control supply voltage U_s :

Ac /Dc 12V, 24V, 48V, 110V, 220V, 230V, 400V

Reference documents.

Certificate LOVAG no. IT 06.066 dated 27 November 2006.
LOVATO General Catalogue 2012-2013 Sect. 2 _ Contactors

Upgrade 2019

CQC CB Test Certificate n. CN26584 (2013-08-06)
STIEE Test Report n. C009-CB2012CQC-040165 (2013-03-21)

Remark:

Installation and use to be according to the manufacturer instruction
Reference ambient temperature on board is 45°C: rated thermal current to be considered accordingly.