

Switched DOL Starters Type NLSTM**CSW

Metal Enclosure to IP55
IEC947-4-1 Issue 11
Installation Instructions



Safety - Important.

All electrical equipment for operating on low voltages contain devices which are capable of causing serious or fatal injuries.

Only skilled & qualified personnel should carry out installation or maintenance work on this equipment and must adhere to all appropriate international, regional & local standards applicable.

CC Newlec DOL-I Rev1

Installation

1. Remove cover from starter by releasing the 4 captive lid screws with screwdriver.
2. Check that the separately supplied Thermal Overload current range is suitable for the motor involved. Fit the overload and assemble the pre-wired Start Contact as shown below.
3. Connect the leads provided in the Starter to the Thermal Overload - Violet wire from Contactor terminal 14 to Overload terminal 95 and Red wire from Contactor terminal 1 to Overload terminal 96.
4. Check the Contactor operating coil Voltage & Frequency is suitable for the intended supply and motor.
5. Remove appropriate top/bottom knockouts and mount the Starter base on a vertical surface, free from any vibrations.
6. Attach required conduits and/or cable glands.
7. Connect the supply and motor cables and ensure ALL terminals are tight.
8. Ensure that all Earth connections are fitted and tight, including the base to lid lead supplied as standard.
9. Once installed, adjust the Thermal Overload setting lever to match the Full Load Current of the motor to be protected.
10. Replace the cover, ensuring that the base mounted seal is in continuous contact with the lid and that the 4 off fixing screws are tight.

Thermal Overload Selection Chart									
Approximate Motor Rating						Overload	Current Range - Amps		Recommended Fuse
400V/3PH AC-3			230V/1PH AC-3			Reference	Min	Max	Amps Maximum
kW	hp	FLC Amps	kW	hp	FLC Amps				
0.37	0.55	1.1	0.07	0.09	1	NLOLC1	1	1.6	4A
0.55	0.75	1.5	0.1	0.125	1.5	NLOLC1	1	1.6	4A
0.75	1	1.9	0.18	0.25	2.1	NLOLC2	1.6	2.5	6A
1.1	1.5	2.6	0.25	0.33	2.6	NLOLC3	2.5	4	10A
1.5	2	3.5	0.37	0.5	3.5	NLOLC3	2.5	4	10A
1.8	2.5	4.1	0.55	0.75	4.7	NLOLC4	4	6	16A
2.2	3	5	0.55	0.75	4.7	NLOLC4	4	6	16A
3	4	6.3	0.75	1	6	NLOLC5	5.5	8	20A
3.7	5	7.8	0.75	1	6	NLOLC5	5.5	8	20A
4	5.5	8.5	1.1	1.5	8.8	NLOLC6	7	10	20A
5.5	7.5	11.3	1.5	2	11.7	NLOLC7	10	13	25A
7.5	10	15.2	2.2	3	17.1	NLOLC8	13	18	32A

Enclosure Dimensions : 184h x 184w x 149d (fixing centres 4 x M4 140w x 140h)

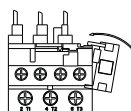
Note: This product is not suitable for DC applications.

The start contact is clipped into position adjacent to terminal 96 on the overload relay.

ASSEMBLY / REMOVAL OF START CONTACT

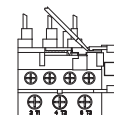
ASSEMBLY:

Locate contact on lower right hand corner of overload relay moulding and rotate anti-clockwise until firmly clipped into place



REMOVAL:

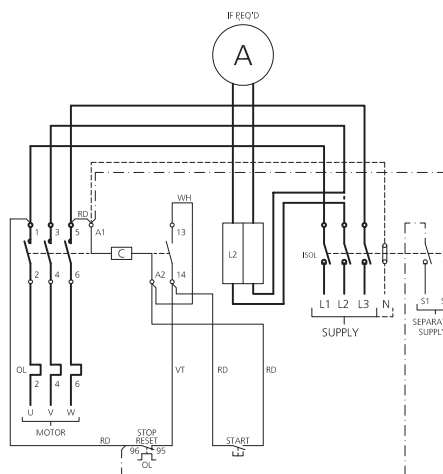
Place small screwdriver blade under leading edge of clip and lever off



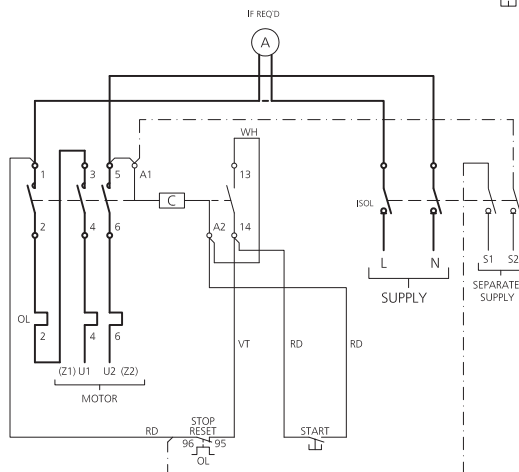
Terminal capacity

	Main	Auxiliary
Contactor	2 x 1 - 4mm ²	2 x 1 - 2.5mm ²
Overload	2 x 1 - 4mm ²	2 x 1 - 2.5mm ²

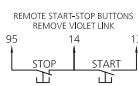
Connection Data



Type NLSTM4**CSW (400V coil)



Type NLSTM2**CSW (230V coil)



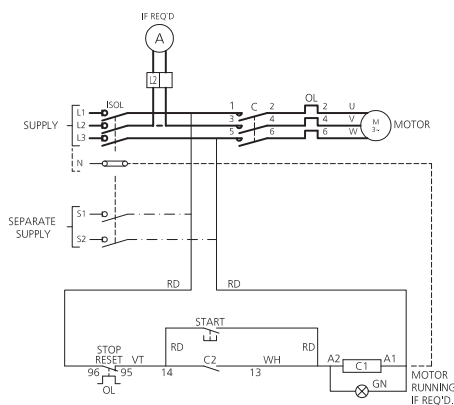
Summary

A direct-on-line motor starter with ingress protection to IP55. Painted steel enclosure.

Trip class 10 requirements IEC 947-4-1

1.05 x FLC	No tripping
1.2 x FLC	Trip within 2 hours
1.5 x FLC	Trip within 4 minutes
7.2 x FLC	Trip between 4s and 10s

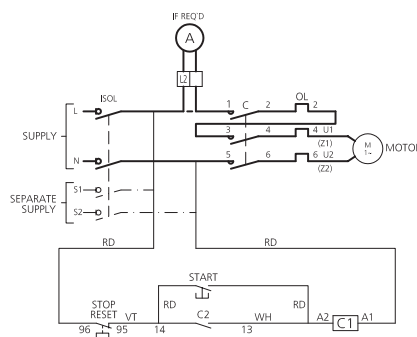
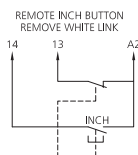
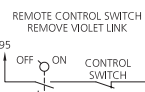
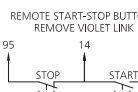
NOTE: FLC = Full load current



FOR LINE & NEUTRAL CONTROL, REMOVE LINK BETWEEN A1 & 5 ON C AND WIRE AS SHOWN DOTTED.

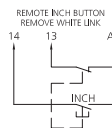
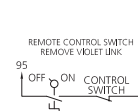
PRESS TO RUN - REMOVE WHITE LINK

SEPARATE NO-VOLT SUPPLY - CONNECT AS SHOWN



PRESS TO RUN - REMOVE WHITE LINK

SEPARATE NO-VOLT SUPPLY - CONNECT AS SHOWN



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