

DOL Reversing Starters Type NLRVM***C

Metal Enclosure to IP55
IEC947-4-1 Issue 1
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 REV 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 kW	Approx hp	Approx FLC Amps	230V/1PH AC-3 kW	Approx hp	Approx FLC Amps	Reference	Min	Max	Amps Maximum
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)

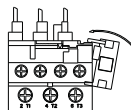
Note: This product is not suitable for DC applications.

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

ASSEMBLY / REMOVAL OF START CONTACT

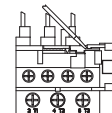
ASSEMBLY:

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



	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

REMOTE PUSH BUTTONS
REMOVE VIOLET LINK

95 14 ON RC 13 ON RC 13 ON FC

STOP REVERSE FORWARD

Diagram 2: Remote Inch Button. This diagram shows a single push button labeled 'FORWARD'. It is connected to terminals 14 ON RC, 13 ON RC, and 61 ON RC. The wiring shows that pressing the button will start the motor in the forward direction.

REMOTE INCH BUTTON
REMOVE WHITE LINK

14 ON RC 13 ON RC 61 ON RC

FORWARD

Diagram 3: Remote Brown Link. This diagram shows a single push button labeled 'REVERSE'. It is connected to terminals 14 ON FC, 13 ON FC, and 61 ON FC. The wiring shows that pressing the button will start the motor in the reverse direction.

REMOVE BROWN LINK

14 ON FC 13 ON FC 61 ON FC

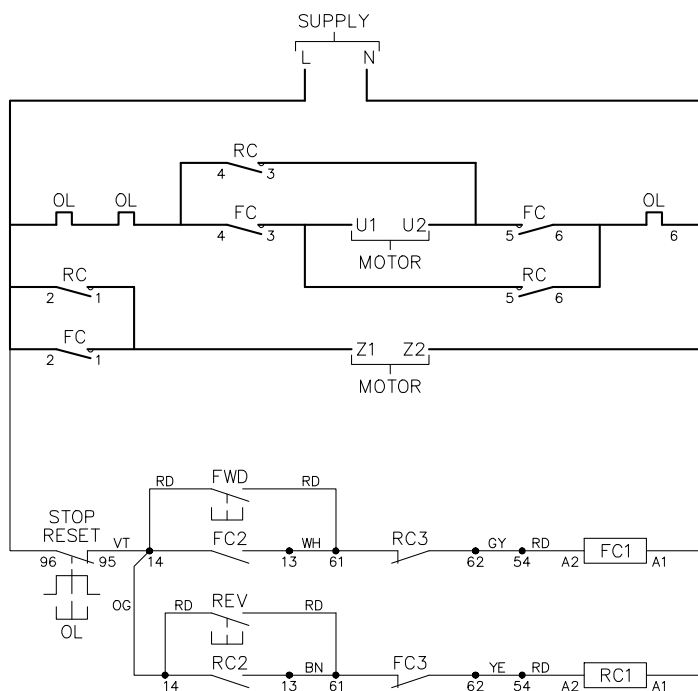
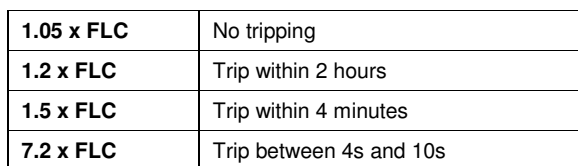
REVERSE

Diagram 4: Remote Limit Switches. This diagram shows two limit switches: 'FWD L/S' and 'REV L/S'. The 'FWD L/S' switch is connected to terminals 62 ON RC and 54 ON FC. The 'REV L/S' switch is connected to terminals 62 ON FC and 54 ON RC. The wiring shows that the forward limit switch will stop the motor when it reaches the forward limit, and the reverse limit switch will stop the motor when it reaches the reverse limit.

REMOTE LIMIT SWITCHES
REMOVE GREY LINK REMOVE YELLOW LINK

62 ON RC 54 ON FC 62 ON FC 54 ON RC

FWD L/S REV L/S



PRESS TO RUN
REMOVE WHITE LINK (13 ON FC-61 ON RC)
REMOVE BROWN LINK (13 ON RC-61 ON FC)

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