

TRANSFORMER OPERATING AND SERVICE MANUAL

QR3WP50kVA 415/ 415V-Taps

Serial Number 54238/54239

October 2018



**594 Old Gympie Road
Narangba QLD 4504**

**PO Box 1005
Burpengary DC
Queensland 4505**

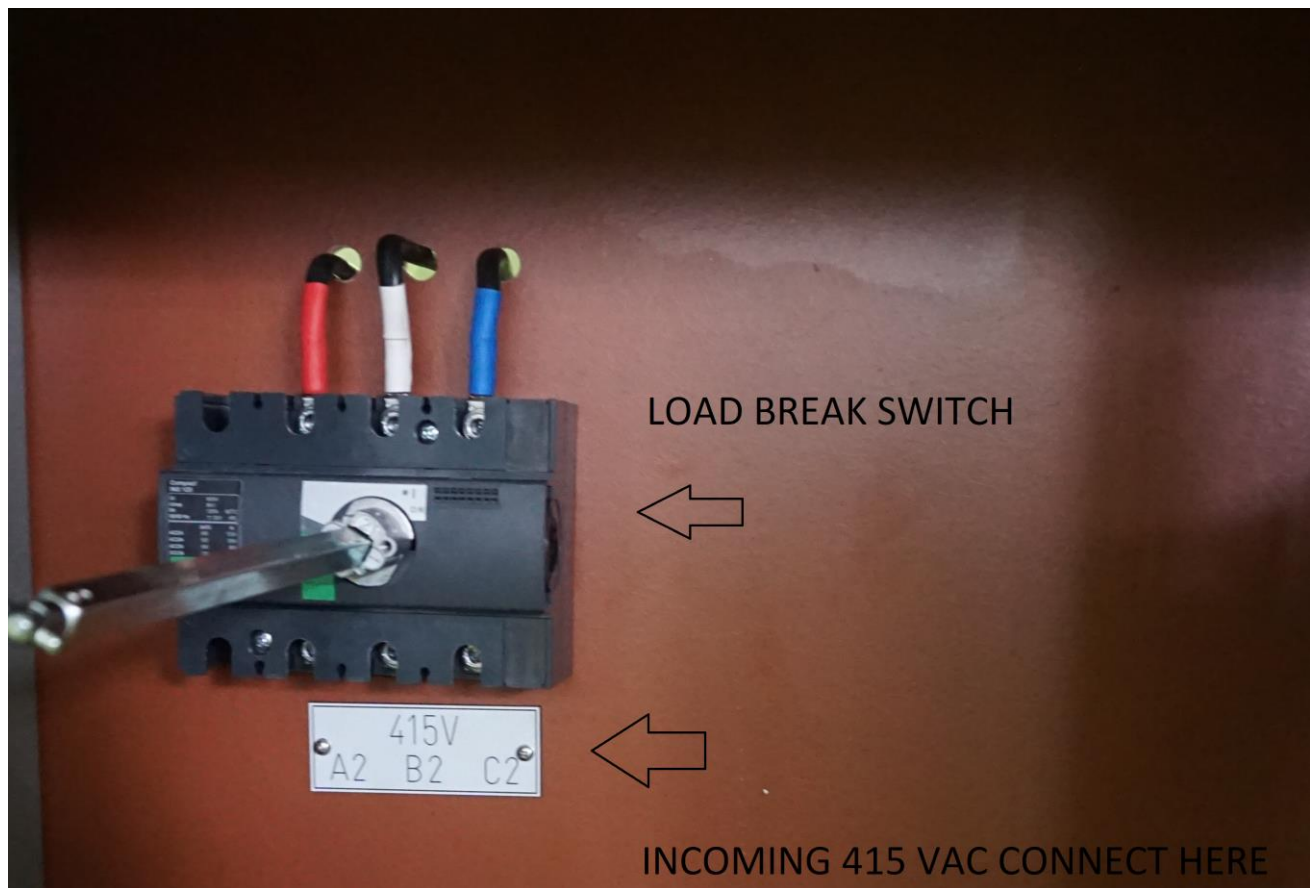
**☎ (07) 3888 6566
✉ (07) 3888 6543
zac@gayrad.com.au**

Transformer Description

Rating:	50kVA
No of phases:	Three Phase
Input Voltage:	415, +/-10%,5%,2.5% V
Input Frequency:	50Hz
Rated Input Current:	71.65A
Output Voltage:	415V
Rated Output Current:	69.45
Serial Number:	54238/54239
Part Number:	QR3WP50kVA 415/415V-Taps
Class of Insulation:	H
Vector Group:	Dyn-11
Max. Temperature Rise:	100 °C
Type of Cooling:	AN
Standard:	AS60076
Enclosure Protection:	IP65

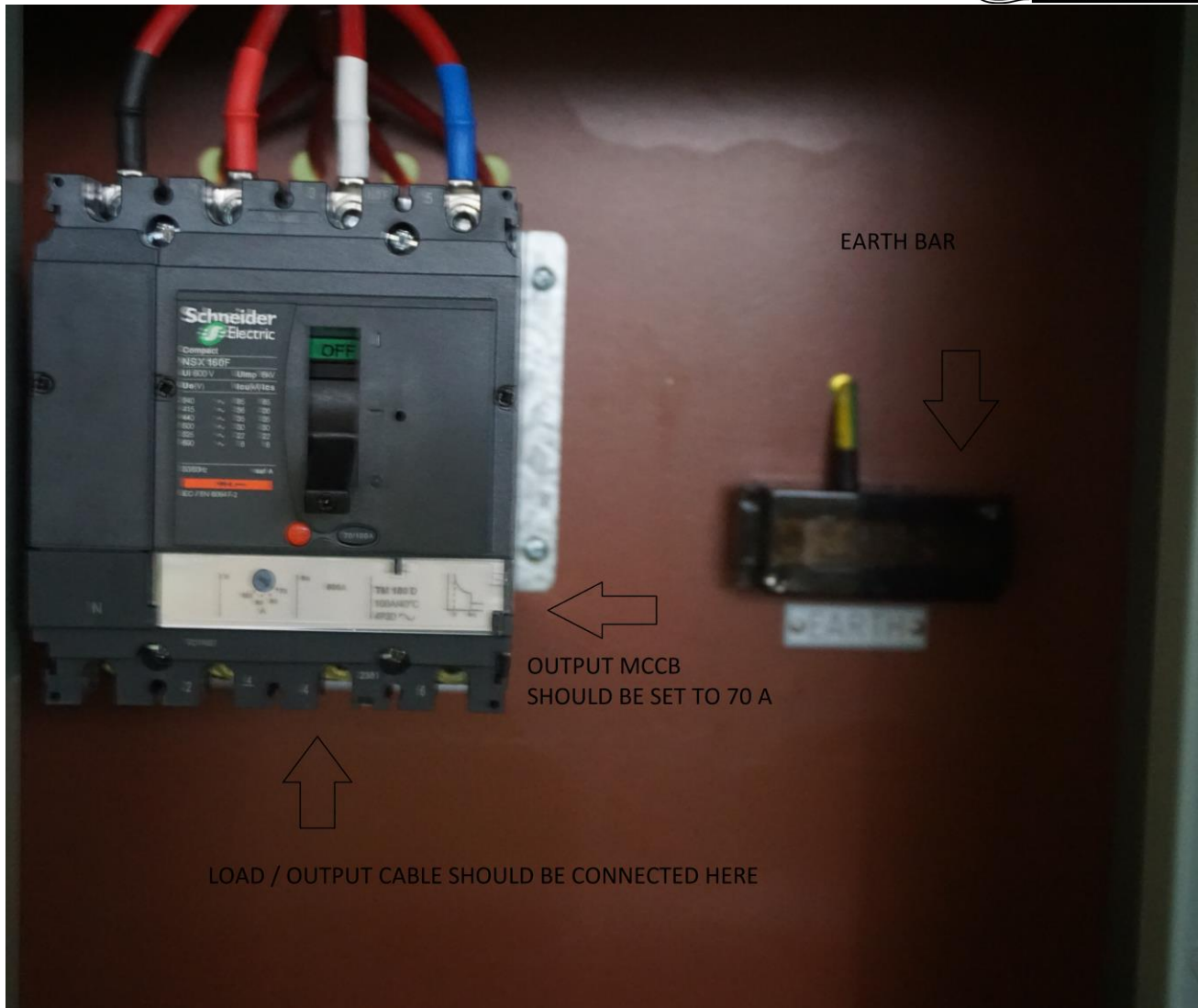
General Instructions

The 50kVA Isolation transformer is a static AC converter, has no moving parts and requires very little regular maintenance once placed in service. To access the terminal boards, firstly open the front doors and remove the access panels on both sides. To make the transformer operational, the 3 phase incoming supply voltage of 415volt, 50Hz should be connected to the terminals A2, B2 and C2 of primary load break switch, situated on the primary panel.



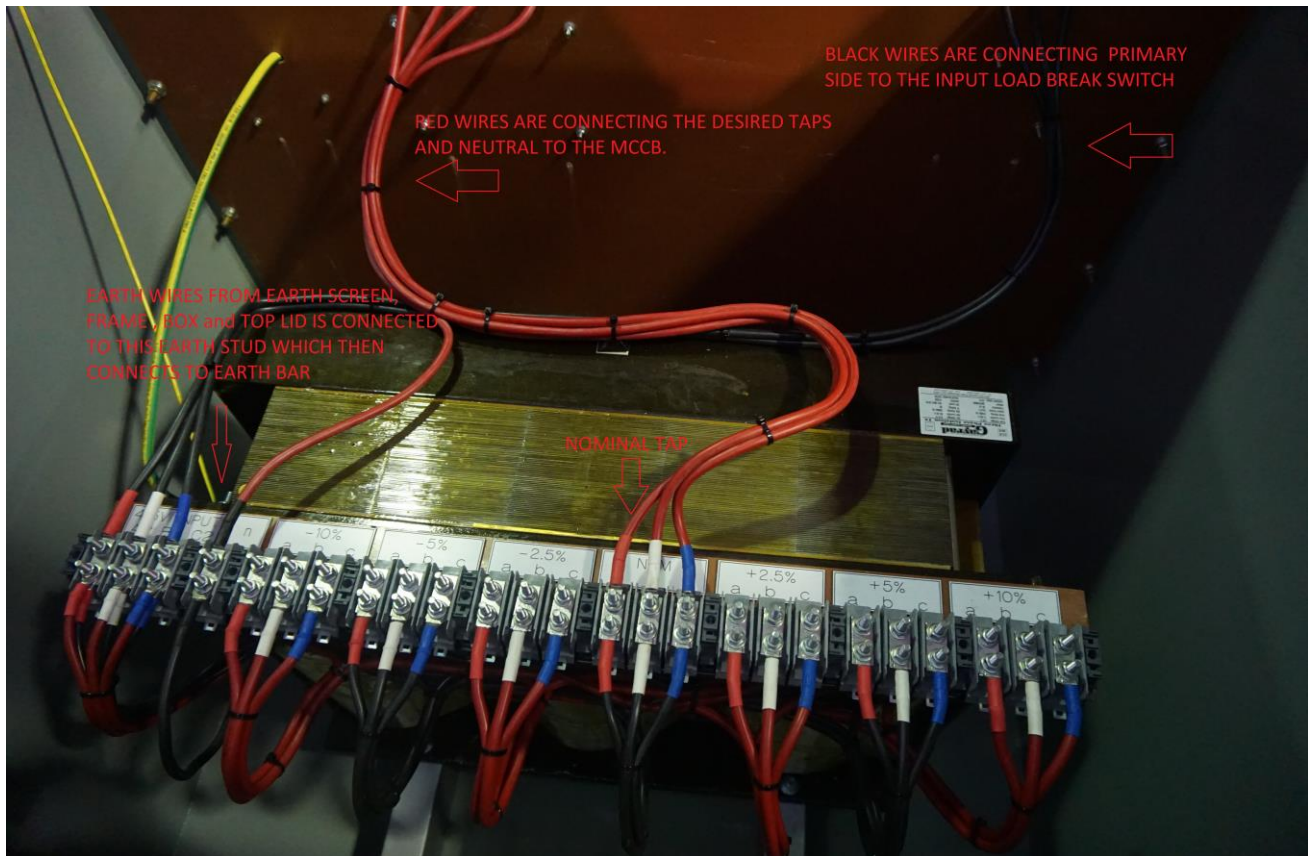
PRIMARY PANEL

On the secondary side (Secondary Panel) the output is nominally 415V P/P and 240V P/N. Connect the load to the bottom end of Schneider MCCB terminals marked a2, b2, c2 and n for the neutral.



SECONDARY PANEL

The taps are present on the top of the transformer in the main enclosure. Taps are present on the secondary winding and can be changed manually to get a voltage range from -10 % to + 10 %. Neutral is common and does not need to be changed. Transformer frame box & earths are brought out and connected to the earth screw stud which is located on the primary side of the transformer. Earth bar is on the Secondary side of the front panel. There is a 12mm stainless steel screw fastened to the bottom front left corner of the transformer enclosure for direct earth connection.



TRANSFORMER IN MAIN ENCLOSURE

Transformer is fitted in an IP65 enclosure with 2 lockable doors and with the steel covers on each side to prevent accidental contact with the HV and LV terminals.

The enclosed transformer can be transported to the required position with the use of lifting lugs which are located on the plinth of the transformer, or by using a forklift. When lifting the enclosure, the forklift needs to enter from the back side. (the transformer is in the center of the main enclosure).

Brass 6mm gland plates are provided in the base of the terminal box for incoming and outgoing cable connections. The transformer and enclosure have been specially prepared to ensure that they are bonded. This is achieved by the preparation of all surfaces and utilizing M10 bolts, washers and spring washers. Before the transformer is made operational, all connections should be checked to ensure they are tight.

From time to time connections should be checked to ensure they are tight, windings and leads checked for dis-colouration, THIS OPERATION SHOULD BE DONE WITH THE POWER DISCONNECTED. The frequency of this procedure will vary depending on the operating conditions.