

TECHNICAL BULLETIN

TB-0159a

New distribution HV switchgear - Siemens 8DJH

Siemens 8DJH switchgear was approved in Aug 2013 and the 8DJH-C in April 2015 for use on Endeavour Energy's 11kV and 22kV network and SDI210 can be referred for further technical details.

Siemens switchgear shall be used on all new Endeavour projects. Safelink switchgear will be restricted for installation in old size 5 and 10 padmounts where width and depth is a restricting factor and Siemens units cannot be fitted (Refer table 2).



Clarifications

- There was an initial issue with the earthing mechanism drive shaft pin coming loose preventing the operation of the earth switch. This problem was only on a batch of early units and has been since rectified.
- Delivery of the first batch of 3 feeder 8DJH-C units (RTRR-C) for padmounts has been delayed until approx August 2015, therefore, until further notice, for 11kV use Safelink 2 and for 22kV units use the limited stock of older 8DJ10-71 units until the new 8DJH-C units arrive. Contact the transformer workshop for further information.
- Delivery of the 4 feeder S/S/S/S is also delayed but will be available by mid June 2015.
- Screened elbows are used for the termination of all cables on 8DJH, check that the cable is suitable for the termination. Only XLPE cable can be terminated and not paper cables. The fuse termination is limited to a 250A elbow and all other terminations are 630A elbows, this means for a fuse unit, 240mm cable will not fit (max 90-120mm cable depending on elbow used).
- The initial batch of Siemens units required that the CTs for the Sigma F&E fault indicator to be fitted around the cable during the cable termination process, this is no longer necessary and all new units have bushing mounted CTs for the fault indicator.
- The CTs for the CB unit will, until notified otherwise, need to be fitted over the transf. cables.

Construction points to note

Ensure the substation earthing bolts are facing out after installation.

Ensure packing channels on sides are removed from switchgear before installation.

Due to varying constructions for old size 5 switching stations there are a couple of options that can be adopted depending on costs and time constraints, they are:-

- Complete removal and replacement with a new culvert, plinth & switching station.
- Cut the plinth and fit the new Siemens switchgear for S/S/S or Safelink for S/S/S/S. Both require 3 door switching station cubicles.
- Cut plinth but install a new switching station on top of the old plinth. Finished ground levels are not to be too dissimilar.



Contact: Glen Ford **Phone:** 02 9853 6691 **Date:** 17 April 2015

Authorised by: Colin Crisafulli, Network Substation Manager

51 Huntingwood Drive, Huntingwood NSW 2148

Telephone: 133 718 Fax: (02) 9853 6000

Postal address: PO Box 811 Seven Hills NSW 1730.



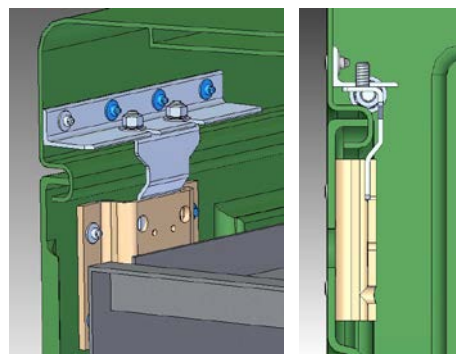
TECHNICAL BULLETIN

TB-0159a

The new Siemens S/S/S/S switching stations have restricted dimensional tolerance when installed in a cubicle. To allow the side doors to close, the spring locks have been removed and fitted with special door retainers (available from the Hoxton Park workshop) as shown. These retainers are also useful and provide additional room for installing 4 function Safelink units in old style size 5 cubicles where required.

Stock Codes

Table 1 shows the stock codes for all the approved Siemens 8DJH switchgear.



Special door retainer

Table 1 - Changes from TB0159 have been highlighted

Stock Code	Product App. No.	Manuf. Ref. No.	Item Description
1547843	530218	8DJH-RT	11/22kV Switch-Fuse + 35mm ² Cu Flexible Leads + 60mm Riser Base
1548072	530221	8DJH-RTR	11/22kV Switch-Fuse-Switch + 35mm ² Cu Flexible Leads + 60mm Riser
	530224	8DJH-RTRR	11/22kV Switch-Fuse-Switch-Switch- For Indoor use ONLY
1547959	530262	8DJH-RTRR-C	11/22kV Switch-Fuse-Switch-Switch - For Padmount use ONLY
1563626	530219	8DJH-RL	11/22kV Switch-CB + 70mm ² Cu Flexible Leads + 60mm Riser Base
1548080	530217	8DJH-RLR	11/22kV Switch-CB-Switch + 70mm ² Cu Flexible Leads + 60mm Riser
1563600	530220	8DJH-RLRR	11/22kV Switch-CB-Switch -Switch For Indoor use ONLY
1547934	530222	8DJH-RRR	11/22kV Switch-Switch-Switch + 60mm Riser Base
1563592	530223	8DJH-RRRR	11/22kV Switch-Switch-Switch-Switch + 125mm Riser Base

Table 2 below shows where the various approved manufacturers switchgear under this contract which shall be used in different types of padmounts and indoor substations.

Table 2 - Changes from TB0159 have been highlighted

Equip. layout- F=Fuse, S=Switch, C=CB and Schneider=Sch, Siemens=Sie, ABB=SL					
Equip. layout	Old Size 5		Old Size 10		Indoor
S/F	Sie-	1547843	SL-	1547819	Sie- 1547843
S/F/S	SL-	1547819	SL-	1547819	Sie- 1548072
S/F/S/S	SL-	1547827	SL-	1547827	Sie-C- 1547959
S/C	N/A		N/A		Sie- 1563626
S/C/S	N/A		N/A		Sie- 1548080
S/C/S/S	N/A		N/A		Sie- 1563600
S/S/S	Sie-	1547934	N/A		Sie- 1547934
	or Replace				
S/S/S/S	SL-	1549054	N/A		Sie- 1563592
	or Replace				Sie- 1563592

Contact: Glen Ford Phone: 02 9853 6691 Date: 17 April 2015

Authorised by: Colin Crisafulli, Network Substation Manager

51 Huntingwood Drive, Huntingwood NSW 2148

Telephone: 133 718 Fax: (02) 9853 6000

Postal address: PO Box 811 Seven Hills NSW 1730.

