

Release Note

1.0 Issue of “Battery Charger Current below 10 Amp” as reported by Zonal Railways for M/s CGL make Auxiliary Converter.

2.0 Firm clarifications:

a. GTO AUX was of 100KVA whereas IGBT AUX is upgraded to 130KVA. To maintain this DC link was increased to 670V in place of 550V in case of GTO.

b. In FUPLA DC link Voltages changes with Battery Voltage and the formula is mentioned below hence the value of WUUB needs to be changed from 37.01% AND 38.01%

$$\mathbf{WUUZ-BL(\%)=WUUZ-NENN(\%)+((WUUB-XUUB)(\%).P)-REG(\%)+(((WUUB-XUUB)(\%).t)/(T-Reg))}$$

WUUZ-BL = Set Point DC- Link Reference voltage when battery regulation active

WUUZ-NENN = Set Point DC- Link Reference voltage when battery regulation active (55%)

WUUB = Set Point Battery reference voltage (37.01%)

XUUB = Actual Battery Voltage

c. In GTO AUX Maximum battery charger current is set to 110A on primary side hence battery charger transformer will have 22A whereas in IGBT AUX the MCB-100 is 20A. Hence these value need to be changed to 95 A show that the battery charger current may around 19 A.

3.0 As per request following changes made in BUR-2 and BUR-3 software.

a. In segment 77 BAT-MONITOR Parameter of PA77_P7701-BChCurLim has been changed to 0.81% from 1.00% and the name has been changed to PA77_P7701-BChCurLim1

b. In segment 82 BL/1BL PARA Parameter of BL-PARA_WUUB has been changed to 38.01% from 37.01% and the name has been changed to BL-PARA_WUUB1.

c. In segment 82 BL/1BL PARA Parameter of BL-PARA_WUILGMAX has been changed to 9.50% from 11.01% and the name has been changed to BL-PARA_WUILGMAX1

The image shows three screenshots of a software parameter configuration window. The top-left screenshot shows the configuration for Segment 77, where the parameter PA77_P7701-BChCurLim has been changed to 0.81% and renamed to PA77_P7701-BChCurLim1. The top-right screenshot shows the configuration for Segment 82, where the parameter BL-PARA_WUILGMAX has been changed to 9.50% and renamed to BL-PARA_WUILGMAX1, and the parameter BL-PARA_WUUB has been changed to 38.01% and renamed to BL-PARA_WUUB1. The bottom screenshot shows a detailed view of the Segment 82 parameters, including BL-PARA_WUUBMAX (40A) at 4.00%, BL-PARA_WUILGMAX1 at 9.50%, BL-PARA_UZTOL-UG at -5.00%, BL-PARA_UZTOL-UGILG at -10.01%, and BL-PARA_UZTOL-OG at 5.00%.

Segment	Block	Parameter Name	Value
77	BAT-MON	PA77_P7701-BChCurLim1	0.81%
82	BL-PARA	BL-PARA_WUILGMAX1	9.50%
82	BL-PARA	BL-PARA_WUUB1	38.01%
82	BL-PARA	BL-PARA_WUUBMAX (40A)	4.00%
82	BL-PARA	BL-PARA_UZTOL-UG	-5.00%
82	BL-PARA	BL-PARA_UZTOL-UGILG	-10.01%
82	BL-PARA	BL-PARA_UZTOL-OG	5.00%