

Instruction for bus bar connections

1. Safety precautions

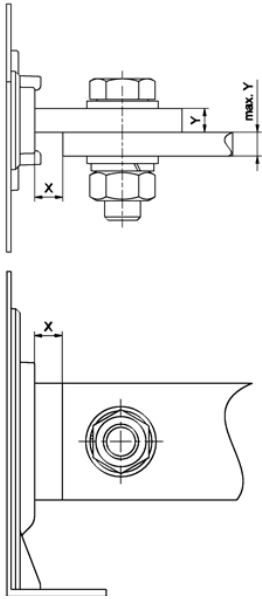
Make sure to disconnect all electrical (mains) connections before installing and connecting the filter. Connect the protective earth terminal(s) first, before attempting to connect phase terminals.

2. Cleaning

Nickel-plated bus bar terminals shall be cleaned with water or ethyl alcohol using a nonabrasive cloth when corroded or dirty.

3. Electrical connection

Connect the filter terminals either with bus bars or flex wires with lugs according to the following drawings to ensure a reliable connection. Please note: make sure that the cross section of the supply lines are of equal or bigger size as the cross section of the filter bus bar terminals. Make sure to consult and respect local, national and international safety codes.



Filter Type	Min. Connecting Cross-Section * [mm ²]	min. X [mm]	Thread Size **	Recommended Torque *** [Nm]
250A to 299A	95	5	M8	27
300A to 399A	120	5	M10	54
400A to 499A	150	5	M10	54
500A to 599A	200	5	M10	54
600A to 699A	240	5	M10	54
700A to 799A	270	7	M10	54
800A to 899A	300	7	M10	54
900A to 1099A	350	7	M12	93
1100A to 1199A	500	7	M12	93
1200A to 1499A	600	7	M12	93
1500A to 1999A	800	7	M12	93
2000A to 2500A	1200	7	M12	93

* ΔT between ambient temperature and bus bar temperature must be smaller than 70K, according IEC/EN 60947-1.

** The screw length is dependent on the customer side connection (one side cable ring lug, both sides cable ring lug, bus bar) and must be determined by customer in a way that safety distances are fulfilled.

*** The recommended torque is based on a strength class of 8.8 (ISO 898-1) and VDI 2230 for galvanized surface without lubrication. Any other bolt type or material needs to be checked by the installer.



Be aware that the filter terminals can get hot under full load operating conditions. Connection with Ag- or Ni-plated copper bus bars are limited to $\Delta T = 70K$. If cable connection, be aware to select appropriate rated cables.

4. Maintenance

It is recommended to check the terminals once a year or during a regular inspection and to tighten the bolts if necessary. If there is any sign of dust or liquids visible around the copper terminals or on the isolation plate, then this area must be cleaned and dried.

			no scale	A4	created	14.07.2022	LUTMST	
					checked	18.08.2022	LUTCAC	
					released	22.08.2022	LUTMST	
C	20008902, New branding 2022 / installation/manuals	22.08.2022	scale	format	status	date	user	
B	20001226, Instruction for bus bar connections	17.02.2016	INSTRUCTIONS FOR BUS BAR CONNECTION					
A	20000071, Update wiring, stripped length and DSH	16.04.2015						
rev.	change no. / change description	date	doc. description					
			several					
			mat. number		project			
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Template: 02-31777 A	schaffner.com		doc. type	doc. number	doc. rev.	page		