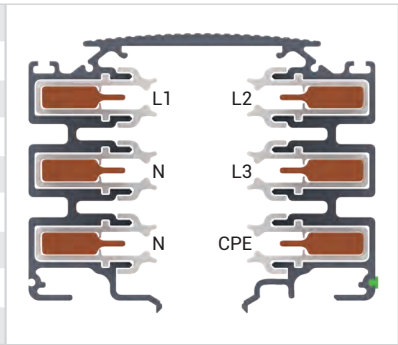


# DATA RACK BUSBAR

## ►► Technical Characteristics



<b>Standards</b>	IEC 61439-6, TS EN 61439-6, IEC 61439-1, TS EN 61439-1
<b>Rated Isolation Voltage</b>	Ui: 1000 V at Cat IV
<b>Max. Rated Operational Voltage</b>	Ue: 1000 Vac
<b>Rated Impulse Withstand Voltage</b>	Uimp: 12 kV
<b>Rated Frequency</b>	f: 50 Hz
<b>Pollution Degree</b>	III
<b>Protection Degree</b>	IP23D
<b>External Mechanical Impacts (IK Code)</b>	IK08
<b>Protection for Safety</b>	Basic Protection (HD 60364-4-41, Clause A1)



			Al				Cu			
RATED CURRENT	$I_n$	A	160	250	400	630	250	400	630	800
BUSBAR CODE			01	02	04	06	02	04	06	08
<b>MEAN PHASE CONDUCTOR CHARACTERISTICS AT RATED CURRENT</b>										
Resistance at a conductor temperature of 20 °C	$R_{20}$	mΩ/m	0,358	0,352	0,234	0,159	0,215	0,211	0,140	0,101
Average resistance at $I_n$ , thermal balance	R	mΩ/m	0,403	0,402	0,283	0,211	0,246	0,258	0,188	0,133
Reactance (Independent from Temperature)	X	mΩ/m	0,098	0,100	0,087	0,077	0,100	0,101	0,090	0,077
Positive and negative sequence impedances at an ambient air temperature of 35 °C	Z	mΩ/m	0,415	0,437	0,311	0,233	0,265	0,292	0,217	0,159
Positive and negative sequence impedances at a conductor temperature of 20 °C	$Z_{20}$	mΩ/m	0,371	0,366	0,249	0,177	0,237	0,233	0,167	0,127
Rated Power Loss at $I_n$		W/m	31	75,4	135,8	251,2	46	123,8	223,9	255,4
Aluminium Housing Section (Aluminium)		mm <sup>2</sup>	94	3302	3302	3302	94	3302	3302	3302
Busbar Weight (4 Conductors)		kg/m	11,1	11,1	12,3	12,6	13,6	13,6	11,6	14,3
Busbar Weight (5 Conductors)		kg/m	11,4	11,4	11,8	13,3	14,6	14,6	13,0	17,0
Busbar Weight (6 Conductors)		kg/m	11,6	11,6	12,3	14,0	15,3	15,3	14,3	18,3
<b>MEAN FAULT-LOOP CHARACTERISTICS</b>										
<b>ZERO-SEQUENCE IMPEDANCE</b>										
Zero-sequence impedance at a conductor temperature of 20 °C	$Z_{(0)b20phN}$	mΩ/m	1,500	1,482	1,016	0,725	0,657	0,949	0,682	0,501
Zero-sequence impedance at a conductor temperature of 20 °C (Housing)	$Z_{(0)b20phPE}$	mΩ/m	0,436	0,701	0,350	0,287	0,296	0,367	0,292	0,193
Zero-sequence impedance at a conductor temperature of 20 °C (Double Notr)	$Z_{(0)b20ph2N}$	mΩ/m	0,996	0,988	0,686	0,510	0,952	0,649	0,485	0,358
Zero-sequence impedance at a conductor temperature of 20 °C (CPE)	$Z_{(0)20phCPE}$	mΩ/m	1,512	1,509	1,039	0,743	0,973	0,962	0,707	0,518
Zero-sequence impedance at an ambient temperature of 35 °C	$Z_{(0)bphN}$	mΩ/m	1,682	1,775	1,272	0,968	0,736	1,191	0,902	0,636
Zero-sequence impedance at an ambient temperature of 35 °C (Housing)	$Z_{(0)bphPE}$	mΩ/m	0,485	0,844	0,441	0,389	0,334	0,470	0,400	0,256
Zero-sequence impedance at an ambient temperature of 35 °C (Double Notr)	$Z_{(0)bph2N}$	mΩ/m	1,114	1,184	0,856	0,680	1,067	0,814	0,643	0,456
Zero-sequence impedance at an ambient temperature of 35 °C (CPE)	$Z_{(0)bphCPE}$	mΩ/m	1,691	1,807	1,300	0,989	1,089	1,206	0,934	0,659
<b>RESISTANCES AND REACTANCES</b>										
Resistance at a conductor temperature of 20 °C	$R_{b20phph}$	mΩ/m	0,717	0,722	0,483	0,346	0,436	0,433	0,305	0,222
Resistance at a conductor temperature of 20 °C	$R_{b20phN}$	mΩ/m	0,726	0,718	0,479	0,342	0,434	0,434	0,301	0,219
Resistance at a conductor temperature of 20 °C (Double Notr)	$R_{b20ph2N}$	mΩ/m	0,553	0,558	0,373	0,274	0,344	0,340	0,241	0,178
Resistance at a conductor temperature of 20 °C (Housing)	$R_{b20phPE}$	mΩ/m	0,376	0,473	0,271	0,207	0,237	0,261	0,192	0,136
Resistance at a conductor temperature of 20 °C (CPE)	$R_{b20phCPE}$	mΩ/m	0,717	0,723	0,485	0,343	0,437	0,427	0,305	0,223
Resistance at an ambient air temperature of 35 °C	$R_{bphph}$	mΩ/m	0,809	0,875	0,618	0,479	0,498	0,562	0,430	0,305
Resistance at an ambient air temperature of 35 °C	$R_{bphN}$	mΩ/m	0,804	0,869	0,613	0,473	0,496	0,564	0,424	0,301
Resistance at an ambient air temperature of 35 °C (Double Notr)	$R_{bph2N}$	mΩ/m	0,623	0,676	0,478	0,378	0,393	0,442	0,339	0,245
Resistance at an ambient air temperature of 35 °C (Housing)	$R_{bphPE}$	mΩ/m	0,424	0,572	0,347	0,286	0,270	0,339	0,271	0,187
Resistance at an ambient air temperature of 35 °C (CPE)	$R_{bphCPE}$	mΩ/m	0,809	0,875	0,620	0,475	0,499	0,555	0,430	0,307
Reactance (Independent from temperature)	$X_{bphph}$	mΩ/m	0,198	0,194	0,169	0,141	0,194	0,196	0,170	0,142
Reactance (Independent from temperature)	$X_{bphN}$	mΩ/m	0,200	0,199	0,170	0,140	0,196	0,197	0,169	0,141
Reactance (Double Notr) (Independent from temperature)	$X_{bph2N}$	mΩ/m	0,149	0,152	0,135	0,114	0,140	0,157	0,137	0,113
Reactance (Housing) (Independent from temperature)	$X_{bphPE}$	mΩ/m	0,098	0,103	0,086	0,075	0,097	0,102	0,088	0,072
Reactance (CPE) (Independent from temperature)	$X_{bphCPE}$	mΩ/m	0,201	0,199	0,173	0,145	0,199	0,214	0,174	0,146