

Material Confirmation

in accordance with EN 45545-2:2020

Device

Item Number	Revision	HW Rev.	Item Type
804101	07	F	LEOS-UM-ETH-SW-WR-LUE

Producer: Friedrich Lütze GmbH
Bruckwiesenstraße 17-19
71384 Weinstadt / Germany

Date: 29.03.2023

Editor: Achilles Bouchlias

Remark:

Description:

total flammable mass ca. 89,393 gr. (rule 1 total flammable mass < 100 gr. at inner area)

Performance Category/s: NO (no certification required according to chapter 4.3.2 rule 1)

Component: EL9 / EL10

This document was created electronically and is valid without signature.

material confirmation for electrical equipment on railway vehicles



Producer:	Device:	Ether-Net Switch Module									
Friedrich Lütze GmbH Bruckwiesenstraße 17-19 71384 Weinstadt / Germany	Item Type:	LEOS-UM-ETH-SW-WR-LUE									
	Item No.:	804101									
								Date:	29.03.2023		
								Editor:	Achilles Bouchlias		

all values apply to one quantity unit																		
material no.	description	quantity	weight [g]	total flammable mass [g]	heat value [MJ]	material	flammable mass [g]	total flammable mass [g]	specific heat value [MJ/kg]	flame class UL94 (EN 60695-11-10)	oxygen index EN ISO 4589-2 OI [%]	optical density EN ISO 5659-2 [Ds]	glowing wire test EN 60695-2-11 [°C]	gas analysis NF X70-100-1/-2 [CIT]	smoke index N FF 16-101	combustion behaviour N FF 16-101	performance category EN 45545-2	hazard level EN 45545-2
985042	PROTECTIVE CAP M12 FEMALE	7	0,839	0,839		PA	0,839	5,873		V-0							R26	HL1-3
985434	FEM. CONNECTOR SMD 4-POLE M12 D	8	1,54	1,1		LCP GF 30 Vectra E130i black	1,1	8,8		V-0	41	3		0,25			R26	HL1-3
																	R24	HL1-3
																	R23	HL1-3
																	R22	HL1-3
985435	FEM. CONNECTOR SMD 8-POLE M12 A	1	1,8	1,03		LCP GF 30 Vectra E130i black	1,03	1,03		V-0	41	3		0,25			R26	HL1-3
																	R24	HL1-3
																	R23	HL1-3
																	R22	HL1-3
985436	MALE CONNECTOR SMD 4-POLE M12 A	1	2,4	1,8		LCP GF 30 Vectra E130i black	1,8	1,8		V-0	41	3		0,25			R26	HL1-3
																	R24	HL1-3
																	R23	HL1-3
																	R22	HL1-3
985442	O-RING SEAL 7X1MM NBR BLACK	9	0,04	0,04		Viton	0,04	0,36										
989478	DIE-CAST ENCLOSURE LEOS	1	777	3,15		RAKU-PUR 32-3207-6	1,35	1,35										
						Makrolon 2205	1,8	1,8	29,7	HB	27		850				R25	HL1-3
991543.0000	PRINTED CIRCUIT BOARD	1	68,38	68,38	0,752	FR4 Rail	68,38	68,38	11	V-0	40,4	292	850	0,2	F2	I2	R26	HL1-3
																	R25	HL1-3
																	R24	HL1-3
																	R23	HL1-3
																	R22	HL1-2