



Switches			Copper twisted pair and fibre optic, managed - extended features			
Interfaces	Copper cable ports	Number and type	8 x 10/100 BASE-TX ports	6 x 10/100 BASE-TX ports	6 x 10/100 BASE-TX ports	
		Shielded connectors	RJ45			
		Medium	Shielded twisted pair, category CAT 5E			
		Total length of pair	100 m			
	Fiber optic ports	Number and type	–	2 x 100BASE-FX ports	2 x 100BASE-FX ports	
		Connectors	–	Duplex SC	Duplex SC	
		Medium	–	Multi mode optical fibre	Single mode optical fibre	
		Length of optical fiber	50/125 µm fiber	–	5,000 m (1)	–
			62.2/125 µm fiber	–	4,000 m (1)	–
			9/125 µm fiber	–	–	32,500 m (2)
		Attenuation analysis	50/125 µm fibre	–	8 dB	–
			62.2/125 µm fiber	–	11 dB	–
			9/125 µm fiber	–	–	16 dB
		Ethernet services	FDR, SMTP V3, SNMP client, multicast filtering for optimization of the Global Data protocol, configuration via Web access, VLAN, IGMP Snooping, RSTP (Rapid Spanning Tree Protocol), priority port, data stream control, secure port.			
Topology	Number of switches	Cascaded	Unlimited			
		Redundant in a ring	max. 50			
Redundancy	Redundant power supplies, redundant single ring, ring coupling					
Power supply	Voltage	Operation	18 - 60 V safety extra low voltage (SELV)			
	Power consumption		10 W	12 W	12 W	
Degree of protection	IP30					
Dimensions W x H x D	120 x 137 x 115 mm					
Conformity to standards	IEC/EN 61131-2, IEC 61850-3, UL 508, UL ISA-12.12.-01 Class 1 Div 2 Group A, B, C, D, CSA 22.2 No. 142 (cUL), CSA 22.2 No. 213 Class 1 Division 2 (cUL), CE, GL, C-Tick					
Alarm relay	Power supply fault, Ethernet network fault or communication port fault (2 A max. volt-free contact at 30 VDC)					
References			TCSESM083F23F1	TCSESM063F2CU1	TCSESM063F2CS1	

(1) Length dependent on the attenuation analysis and attenuation of the fiber optic (typical value: 2,000 m).

(2) Length dependent on the attenuation analysis and attenuation of the fiber optic (typical value: 15,000 m).