

Integral EvoxX C power calculation

SCHRACK
S E C O N E T

project:	KD Střelnice	valid for IRP 8.4.x
editor:	Jiří Macháček	calc date: 15.03.2022

battery configuration:	OK	OK	OK	PRAVDA	PRAVDA
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battery type:	CTM CT17-12	nominal capacity:	17 Ah	PSU nom. current:	4 A
battery pairs:	2	effective capacity:	17 Ah	back-up time	24 h
		total capacity:	34 Ah	back-up time - special detectors sys. (SDS):	24 h

configuration sub control unit:	Displaylight mode: Std	idle current:	alarm current:
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control panel type:	B9-CII	1	8,00	8,0	27,0
EPI #1-3:	(-)	(-)	0,00	0,0	0,0
basic controller unit:	B9-BCU-X2	1,00	62,00	62,0	62,0
Slot 2	B4-USI		21,00	21,0	21,0
	B9-PSU		13,00	13,0	13,0
					123,0

+ 0 SFP modules	idle current:	alarm current:	0	quantity:	idle current:	alarm current:
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+ 3 MMI Bus devices	idle current:	alarm current:	MMI-EQ	quantity:	idle current:	alarm current:	EPI
(max. 15 TN pro MMI-Bus, max. 8 BDF pro TZ, max. 8 FBF pro TZ)				1			
MMI Bus in Verwendung	2,500	2,500	15	1	2,50	2,50	
B8-MMI-CIP (ext. panel)	30,000	50,000	1	2	60,00	100,00	1
B8-MMI-CIP+PDR (ext. panel + printer)	32,000	52,000	1		0,00	0,00	1
B5-MMI-HCIP (High-End panel)	97,000	97,000	1		0,00	0,00	0
B3-MMI-FPA (Austria)	14,000	30,000	2		0,00	0,00	0
(-) (-)	0,000	0,000	0		0,00	0,00	0
B3-MMI-UIO (1x UIO)	14,000	46,000	2		0,00	0,00	0
B3-MMI-EAT64 (2x UIO)	28,000	92,000	4		0,00	0,00	0
B3-MMI-IPEL (2x UIO)	28,000	92,000	4		0,00	0,00	0
B5-MMI-PIP (floor indication panel)	30,000	50,000	1	1	30,00	50,00	1
(-) (-)	0,000	0,000	0		0,00	0,00	0
(-) (-)	0,000	0,000	0		0,00	0,00	0
(-) (-)	0,000	0,000	0		0,00	0,00	0

<- Numbers of MMI devices (expand with [+])

+ 1 EPI Bus devices on MMI bus	idle current:	alarm current:			idle current:	alarm current:
B5-EPI-FPA (Austria)	5,000	5,000	3	1	5,0	5,0
B5-EPI-ASP AlarmScrollPanel	2,000	2,000	3		0,0	0,0
B5-EPI-PCM (LED & Tastenfeld)	5,000	5,000	3		0,0	0,0
B5-EPI-PIM (LED panel)	5,000	5,000	3		0,0	0,0
B5-EPI-PIC (LED panel)	6,000	6,000	3		0,0	0,0
		1	1	1		
				sub-total:	201,5	280,5 mA

peripherals:

X-Line/ DAI/ SXI:							
X-Line: <div>2</div>		X-Line DAI-mode <div></div>		DAI-Loop <div>0</div>			
IR [mA] 16		IR [mA] 12		IR [mA] 13			
ILED[mA] 13		ILED[mA] 24		ILED[mA] 24			
IALtyp [mA] 130		IALtyp [mA] 90		IALtyp [mA] 60			
IALmax [mA] 170		IALmax [mA] 110		IALmax [mA] 90			
(DC-DC converter efficiency of 70%)		idle current:	alarm current:	MEQ	quantity:	idle current:	alarm current:
MTD 533X	MTD 533X	0,120	2,500	1		0,00	0,00
CMD 533X	CMD 533X	0,150	2,500	1		0,00	0,00
MCP 535X	MCP 535X	0,090	2,500	1		0,00	0,00
X-Line detector (typ) ³	(MTD,MCP,CMD,...)	0,120	2,500	1	185	31,71	31,71
MTD533X-Sx(typ)	Detector w. Siren (typ. vol.)	0,150	4,00	1		0,00	0,00
LED current (incl. Indicator)	BX-UIP, USB501-20	0,000	1,00	0		0,00	37,14
BX-Sirenen (typ)	BX-Sirenen (typischer Mix)	0,500	4,00	4		0,00	0,00
BX I/O modules (typ)	(O1,I2,OI3,IM4,REL4,IOM,...)	0,550	0,55	4	5	3,93	3,93
BX-AIM (input)	BX-AIM (input)	6,500	8,50	5		0,00	0,00

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sub-total: 45,70 82,90 mA

back-up time ("quiescent"+"alarm") (=132,1h)	eff. battery capacity > required battery capacity	OK
battery charge >80% capacity in 24h	(max. output cur. - quiescent cur.) > min. charging cur.	OK
Power supply unit load	(Alarm current < max. PSU current)	OK