

## Calculation tool for the 24V DC emergency power supply for VARIODYN® D1

Please specify the stand-by and alarm time:

Standby time in hours [h]  
Alarm time in hours [h]

24
0,5

Please specify the number of devices:

	Order number	Device
2XH250	580221	Power Amplifier 2XH250W/100V
2XH500	580222	Power Amplifier 2XH500W/100V
2XD250	580231	Power Amplifier 2XD250W/100V
2XD400	580232	Power Amplifier 2XD400W/100V
DOM4-8	583361.22	Digital Output Module DOM4-8
DOM4-24	583362.22	Digital Output Module DOM4-24
SCU	583381.22	System Communication Unit SCU
Switch	583392 / 93	Fiber Optic Ethernet Switch (Multi-/Singlemode)
-----	-----	Additional load

Number		Current consumption in Ampere			
Main amplifier	Backup amplifier	in standby	at 1/8	at 1/3	at full power
0	0	0,0	0,0	0,0	0,0
0	0	0,0	0,0	0,0	0,0
10	2	4,8	36,0	88,0	250,0
0	0	0,0	0,0	0,0	0,0
5		5,0	8,0	8,0	8,0
1		1,0	1,8	1,8	1,8
2		2,0	2,4	2,4	2,4
0		0,0	0,0	0,0	0,0
		0,0	0,0	0,0	0,0

Summary current consumption

12,8	48,2	100,2	262,2
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Please select the amplifier standby time mode:

Specifies how amplifiers react while emergency power operation.  
Setting is depending on local standards (supervision)!  
Low priority announcements (e.g. music) will always be deactivated  
and authorized announcements (e.g. alarm) are always possible!

Only on for supervision (recommended)



Please specify the burst ratio 1/x for voice alert:

The ratio is normally 1/3 for siren  
and 1/8 for voice alert

at full power



Calculated minimal accumulator capacity for 24V [Ah]

450,7
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List of required emergency power components:

581720	Emergency power sup. EN54-4/A2
581730	Accumulator 12V / 105 Ah
581731	Accumulator 12V / 150 Ah

4
0
8