

BATTERY CALCULATION FOR ADDRESSABLE TYPE FIRE ALARM CONTROL PANEL

Project Name:	KNIT REFLEX LTD.
Address:	DHAKA-MUNSHIGANJ ROAD, GOGNAGOR, SYEDPUR, NARAYANGANJ-1400,BANGLADESH.
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Name of the Equipment	Quantity	Standby Current (Amp)		Alarm Current (Amp)	
		Amp	Sub-Total	Amp	Sub-Total

FIRE ALARM CONTROL PANEL:

MAIN UNIT SYSTEM POWER SUPPLY CARD/BATTERY CHARGER WITH IDNET CARD AND OPERATOR INTERFACE (MODEL: 4100-9211)	1	0.373	0.373	0.47	0.47
XPS CARD For NAC(4100-5102)	1	0.05	0.05	0.05	0.05
LOOP CARD (MODEL: 4100-3109)	1	0.05	0.05	0.06	0.06

INITIATING DEVICES:

SMOKE DETECTOR (MODEL: 4098-9714)	99	0.0008	0.0792	0.001	0.099
HEAT DETECTOR (MODEL: 4098-9733)	8	0.0008	0.0064	0.001	0.008
MULTI DETECTOR (MODEL: 4098-9754)	77	0.0008	0.0616	0.001	0.077
MANUAL PULL STATION (MODEL: 4099-9006)	23	0.0008	0.0184	0.001	0.023
CONTROL MODULE (MODEL: 4090-9002)	40	0.0008	0.032	0.001	0.04
MONITOR MODULE (MODEL: 4090-9001)	42	0.0008	0.0336	0.001	0.042

DEVICE LED ON, DURING FIRE ALARM (TOTAL INITIATING DEVICES)	184			0.002	0.368
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FAULT ISOLATOR Module (Relay) (MODEL: 4090-9116)	16	0.0008	0.0128	0.001	0.016
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NOTIFICATION DEVICES:

NON-ADDRESSABLE HORN (MODEL: 4901-9820)	0	0	0	0.023	0
NON-ADDRESSABLE HORN WITH STROBE (MODEL: 4906-9127)	24	0	0	0.075	1.8

Net Standby Load (Amp)	0.717	
Net Alarm Load (Amp)		3.053

Required Standby Duration: 24 Hours	
Required Alarm Duration: 0.25 Hours(15 minutes)	

Total Required Standby Battery Capacity	17.208	Amp-Hours
Total Required Alarm Battery Capacity	0.76325	Amp-Hours
Total Calculated Battery Capacity	17.97125	Amp-Hours
Required Factor of Safety	20%	
Required Battery Size/ Capacity	21.5655	Amp-Hours

24 Volt 26Amp SLA Battery is Supplied.