SLC Loop length Loop1

			Pcs	Standby mA	Alarm mA	Standby mA	Alarm mA
AP200 detectors							
Optical smoke detector,with isolator		ESMI 22051EI	2	0,2	(3,5)*	0,4	0,4
Optical smoke detector		ESMI 22051E	20	0,2	(3,5)*	4,0	4,0
Photo -thermal detector, with isolator		ESMI 22051TEI	7	0,2	(3,5)*	1,4	1,4
Photo -thermal detector		ESMI 22051TE	45	0,2	(3,5)*	9,0	9,0
ROR Thermal detector, with isolator		ESMI 52051REI	4	0,2	(3,5)*	0,8	0,8
ROR Thermal detector		ESMI 52051RE	6	0,2	(3,5)*	1,2	1,2
Manual call point, with isolator		MCP5A, WCP5A	7	0,4	(5,0)*	2,8	2,8
Sounder strobe, with isolator, WSS-PR-I33	Medium Volume	2	30	0,2	6,1	6,0	182,7
Sounder strobe, with isolator, WSS-PR-I33	High Volume	2	1	0,2	8,6	0,2	8,6
Control unit, 1 output		EM201E	2	0,5	0,5	1,0	1,0
240V- DIN-rail relay control unit		EM201E-240	2	0,5	0,5	1,0	1,0
Total number of field devices			**126**				
Loop components in total (mA)						**28**	**248**

Max allowed load	**350**	**mA**
Amount of isolators	53	
Total resistance of isolators	6,27	Ω
Resistance / AP200 isolator (detector)	0,13	Ω
Resistance AP200 modules	0,135	Ω
- EM210E-CZ and EM210E-CZR	0,185	Ω
- EM201E-240 (DIN also)	0,125	Ω
Resistance / KAC MCP isolator	0,13	Ω
Resistance / KAC sounder isolator	0,11	Ω
Load division factor	0,85	
Max allowed voltage drop	8	V
Average duty cycle factor	0,9	
Load caused by possible short cut in two isolators	30	mA
Max loop resistance (including isolators)	**60**	**Ω**

Max cable resistance (Ω) **23,1**

Cable type	Ω/km	Length[m]
Ø = 2 x 0,5 mm ~ 2 x 0,2 mm^2	178	**130**
Ø = 2 x 0,8 mm ~ 2 x 0,5 mm^2	70	**330**
Ø = 2 x 1,0 mm ~ 2 x 0,8 mm^2	45	**513**
Ø = 2 x 1,1 mm ~ 2 x 1,0 mm^2	37	**624**
Ø = 2 x 1,4 mm ~ 2 x 1,5 mm^2	23	**1004**
Ø = 2 x 1,5 mm ~ 2 x 1,8 mm^2	20	**1155**
Ø = 2 x 1,8 mm ~ 2 x 2,5 mm^2	14	**1650**
Ø = 2 x 2,3 mm ~ 2 x 4,0 mm^2	9	**2567**
Ø = 2 x 2,5 mm ~ 2 x 5,0 mm^2	7	**3300**

NOTE!
Calculations are based on the nominal resistance of copper (ρ = 0,0175)