

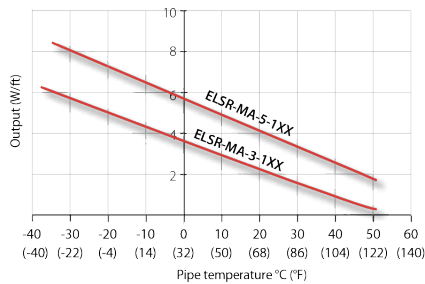
## Heating Circuit Length for ELSR-MA Models

120VAC			
Start-up temperature	CB capacity (A)	Heating circuit length (ft.) for	
		ELSR-MA-3-1-XX	ELSR-MA-5-1-XX
10 °C (50 °F)	10	208	132
	15	233	190
	20	233	190
	25	233	190
0 °C (32 °F)	10	170	110
	15	213	174
	20	213	174
	25	213	174
-10 °C (14 °F)	10	146	94
	15	197	150
	20	197	161
	25	197	161
-30 °C (-22 °F)	10	113	73
	15	172	117
	20	172	141
	25	172	141

240VAC			
Start-up temperature	CB capacity (A)	Heating circuit length (ft.) for	
		ELSR-MA-3-2-XX	ELSR-MA-5-2-XX
10 °C (50 °F)	10	415	320
	15	415	346
	20	415	346
	25	415	346
0 °C (32 °F)	10	379	273
	15	379	320
	20	379	320
	25	379	320
-10 °C (14 °F)	10	325	239
	15	349	299
	20	349	299
	25	349	299
-30 °C (-22 °F)	10	255	190
	15	307	266
	20	307	266
	25	307	266

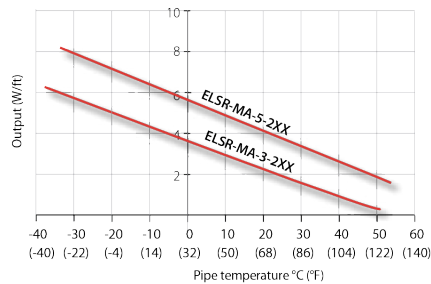
### ELSR-MA-XX-1-XX output

(on insulated metallic pipes, in accordance with IEEE 515/CSA 22.2 130-03)



### ELSR-MA-XX-2-XX output

(on insulated metallic pipes, in accordance with IEEE 515/CSA 22.2 130-03)

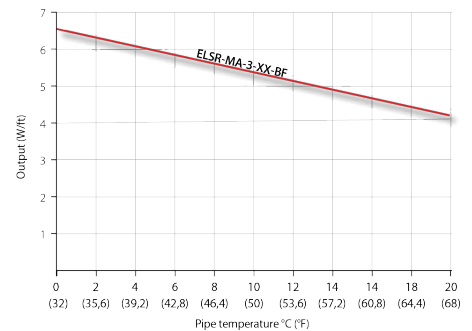


## Heating Circuit Length for ELSR-MA-BF Models

120VAC		
Start-up temperature	CB capacity (A)	Heating circuit length (ft.) for
		ELSR-MA-3-1-BF
10 °C (50 °F)	10	139
	15	167
	20	167
	25	167
0 °C (32 °F)	10	112
	15	153
	20	153
	25	153

240VAC		
Start-up temperature	CB capacity (A)	Heating circuit length (ft.) for
		ELSR-MA-3-2-BF
10 °C (50 °F)	10	241
	15	302
	20	302
	25	302
0 °C (32 °F)	10	202
	15	282
	20	282
	25	282

### ELSR-MA-3-XX-BF (in a filled water pipeline)



### Heating circuit lengths on the following conditions (ELSR-MA-XX and ELSR-MA-XX-BF):

- 120/240 Voltage
- Voltage drop max. 10%
- MCB type QO (100% utilization)
- Single cable fed 1 end