

MX MCCB EM

Electronic type release

User Instruction



Danger, installation and use by electricians only



EM release has four-stage protection of overload, short circuit short-time delay, short circuit instantaneous protection and earth fault, with real-time current display, protection parameter information display, fault information display and parameter setting function.

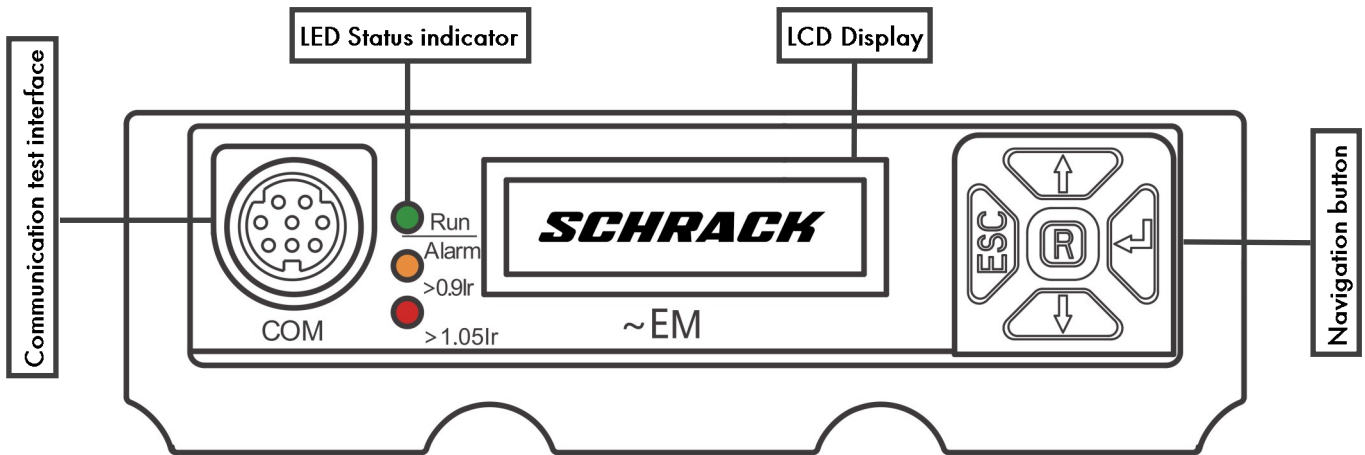
Table 1, Protection for power distribution

Type EM		250	630	1600
Over-load long-time delay protection	Setting current $I_r = I_n \times \delta I_r$	0,4 ~ 1,0, Stepping 1A		
	δI_r , tripping time T_r (s)	3 ~ 18, 1s, Accuracy $\pm 10\%$		
Short circuit short-time delay protection	Setting current $I_{sd} = I_{rx}$	1,5 ~ 10, Stepping 1A, OFF, Accuracy $\pm 15\%$		
	Tripping time T_{sd} (s)	0.1-0.2-0.3-0.4, Accuracy $\pm 20\%$ or ± 40 ms (higher value will be selected)		
Short circuit instantaneous protection	Setting current $I_i = I_{ix}$	1,5 ~ 12, Stepping 1A, OFF, Accuracy $\pm 15\%$		
	Max. tripping time(ms)	60		
Earth fault protection	Setting current $I_g = I_{ix}$	0,4-0,5-0,6-0,7-0,8-0,9-1,0, OFF, Accuracy $\pm 15\%$		
	Tripping time (s)	0.1-0.2-0.3-0.4, Accuracy $\pm 15\%$		
Neutral line protection	Setting current	$I_{rN} = (0,5, 1) \times I_{ri}$; $I_{sdN} = (1,5 \sim 10) I_{ri}$; $I_{iN} = (1,5 \sim 12) I_{ri}$; OFF		
	Tripping time (s)	The same with the other three-phase poles		

Table 2, Electronic type rated current

Frame size rated current I_n A	Rated current I_n A
250	32, 63, 100, 160, 250
400	250, 400
630	250, 400, 630
800	630, 800
1600	800, 1000, 1250, 1600

Diagram 1, Power Distribution Protection EM Controller Interface and Operation Guide



Communication test interface: externally connect the battery box to supply power to adjust the controller parameters; external communication module or dedicated handheld test equipment

LED Status indicator: Under normal working status, the green working status indicator flashes. When the actual current $\geq 90\%I_r$, the yellow warning light is on, and when $I < 90\%I_r$, the yellow warning light is off. When the actual current $\geq 105\%I_r$, the red overload warning light is on, when $I < 105\%I_r$, the overload warning light is off.

Navigation keys:

Up and down keys: page turning, changing status and values

Left button (ESC): return to the previous interface, shift to the left

Right button (confirm button): enter the next layer interface, confirm

Middle button (R): return to the real-time current display interface

Diagram 2, Real-time current cycle display

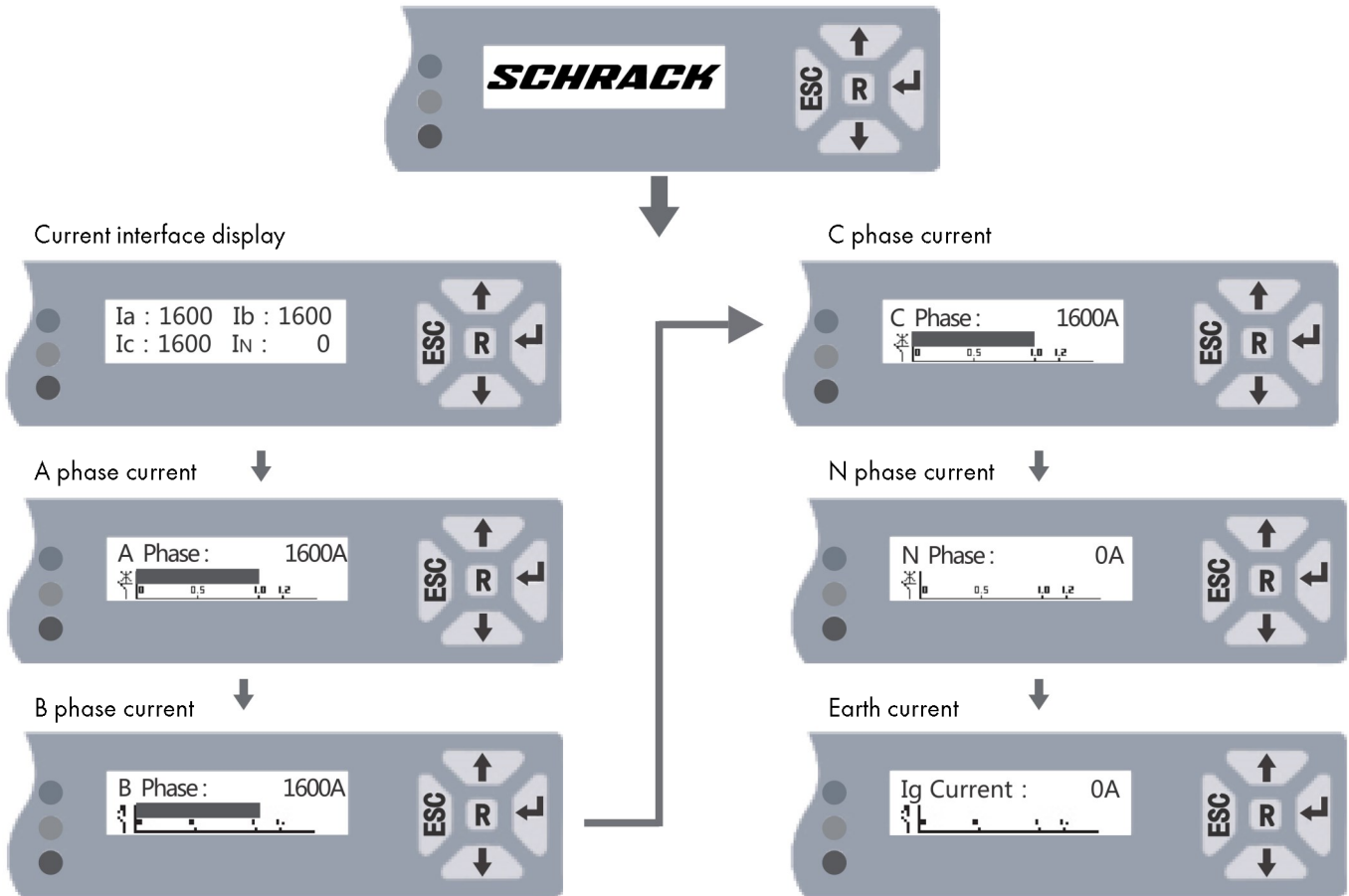
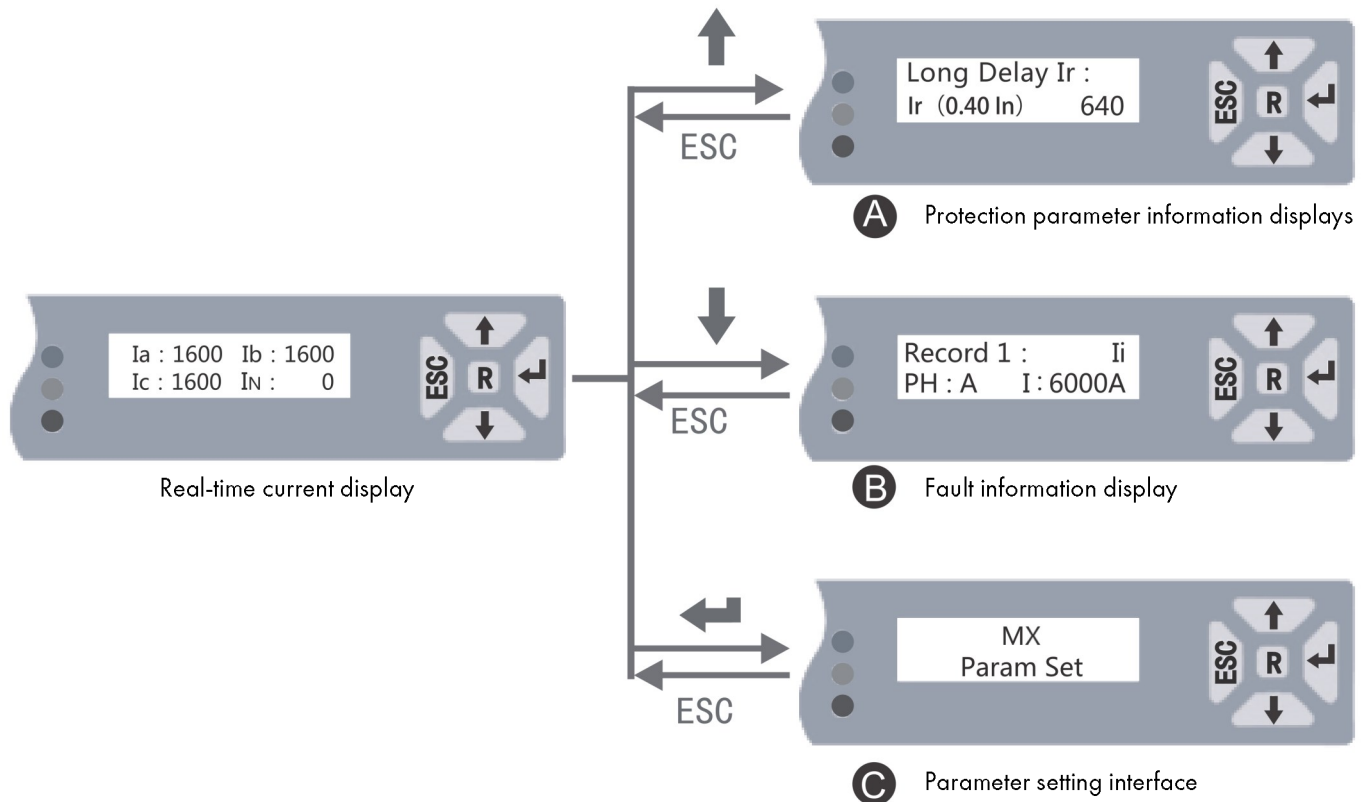


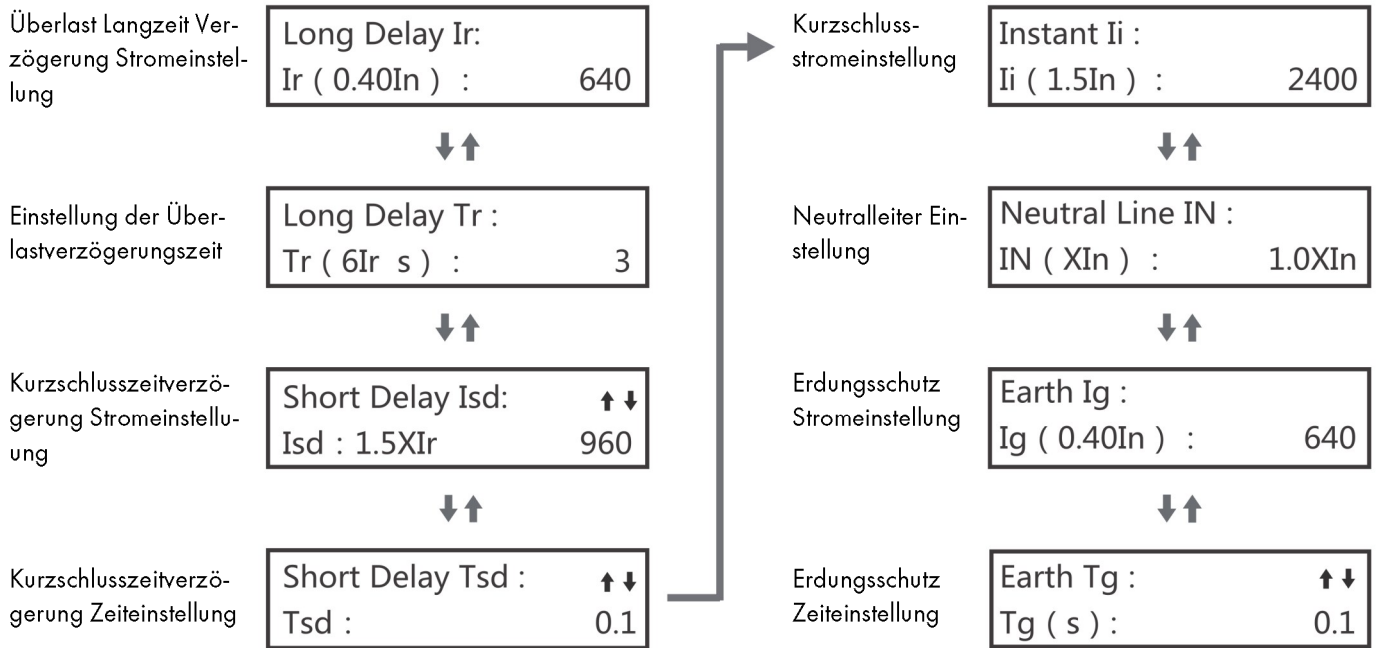
Diagram 3, Main menu



Beispiele für EM-Stromverteilungsschutz

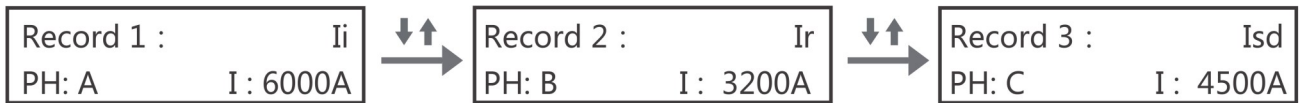
A Parameterabfrage

Beispiel 1., MX4 drücken Sie die "↑" Taste in der aktuellen Anzeige, um die Abfrageoberfläche aufzurufen.



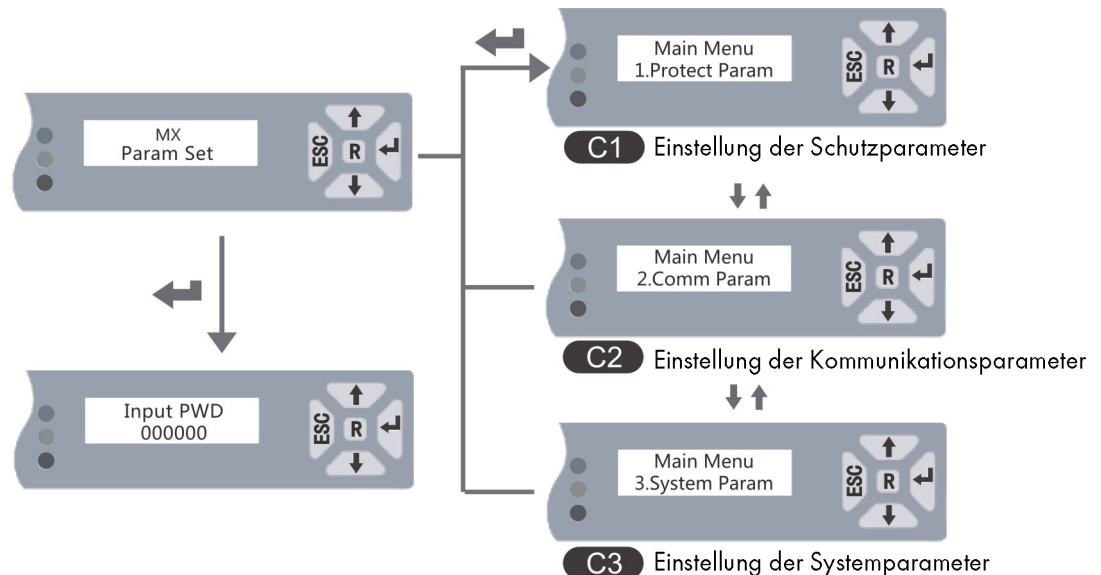
B Fehler in der Formationsabfrage

Drücken Sie die Taste „“ in der aktuellen Anzeigeoberfläche, um die Schnittstelle für die Abfrage von Fehlerinformationen aufzurufen. Die Fehlerinformationen können 3-mal aufgezeichnet werden.



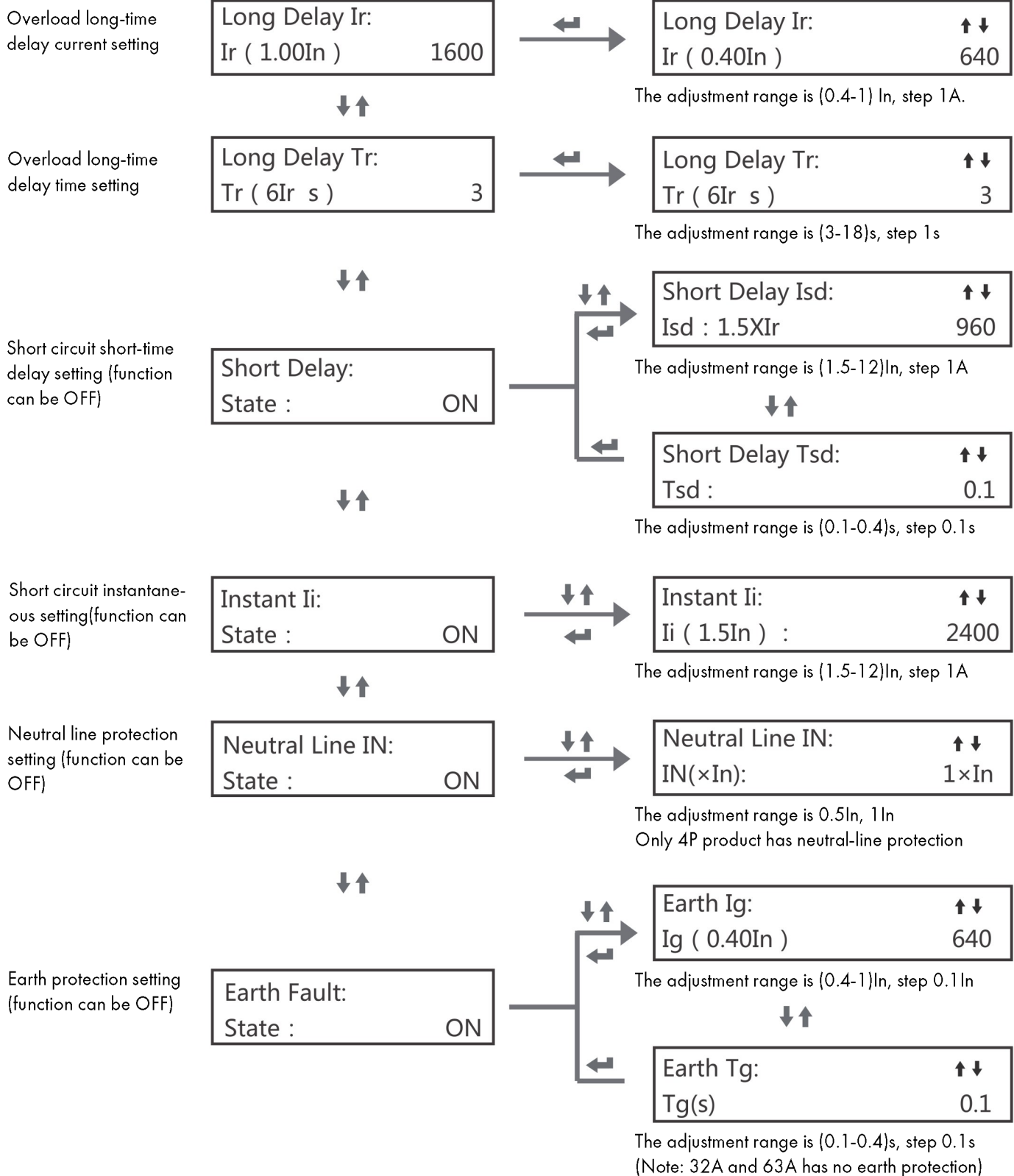
EM-Stromverteilung Typ Smart Unit Fehlertyp: langzeitverzögerter Fehler, kurzzeitverzögerter Fehler, unverzögerter Fehler, Erdschluss.

C Parameter Einstellung

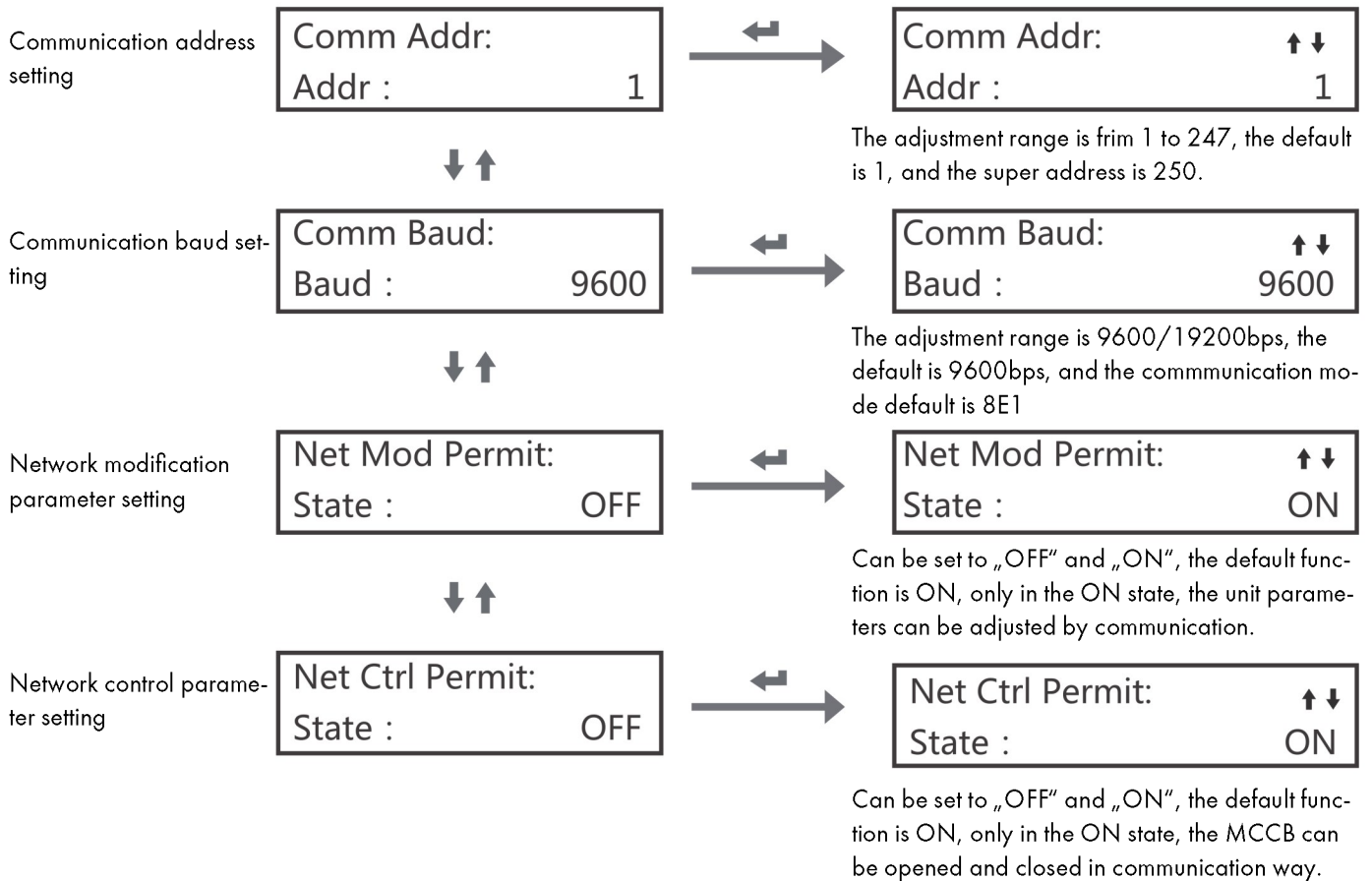


C1 EM Power distribution protection parameter setting

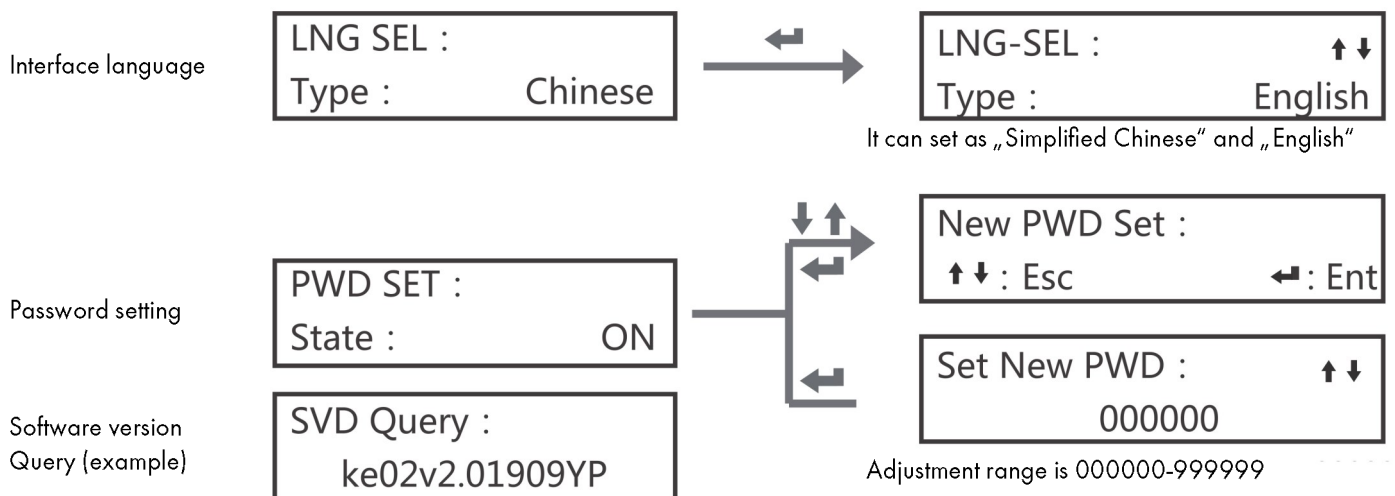
Enter the adjustment page by "←", "↑↓" means it can be modified, "↑" and "↓" to adjust the value, ESC key cancels the change, "←" to save the data after modification.



C2 Communication parameter setting



C3 System parameter setting



Note:

1. MX electronic trip unit is suitable for 50Hz/60Hz, rated voltage below 690V.
2. The power supply of the electronic trip unit is powered by the built-in current transformer. When the main circuit current is $\geq 0.4I_n$, the electronic trip unit can work normally.
3. The electronic trip system can view and modify the parameter settings by supplying power to the controller through an external dedicated battery box or hand-hold test equipment
4. Operating temperature $-25^{\circ}\text{C} \sim +70^{\circ}\text{C}$, storage temperature is $-35^{\circ}\text{C} \sim +85^{\circ}\text{C}$