

„Trumpo jungimo indikatorių 10 kV KL tinkle nuostatų parinkimo atmintinė (Flair 23DM)“

AB „Energijos skirstymo operatorius“

2020 m.

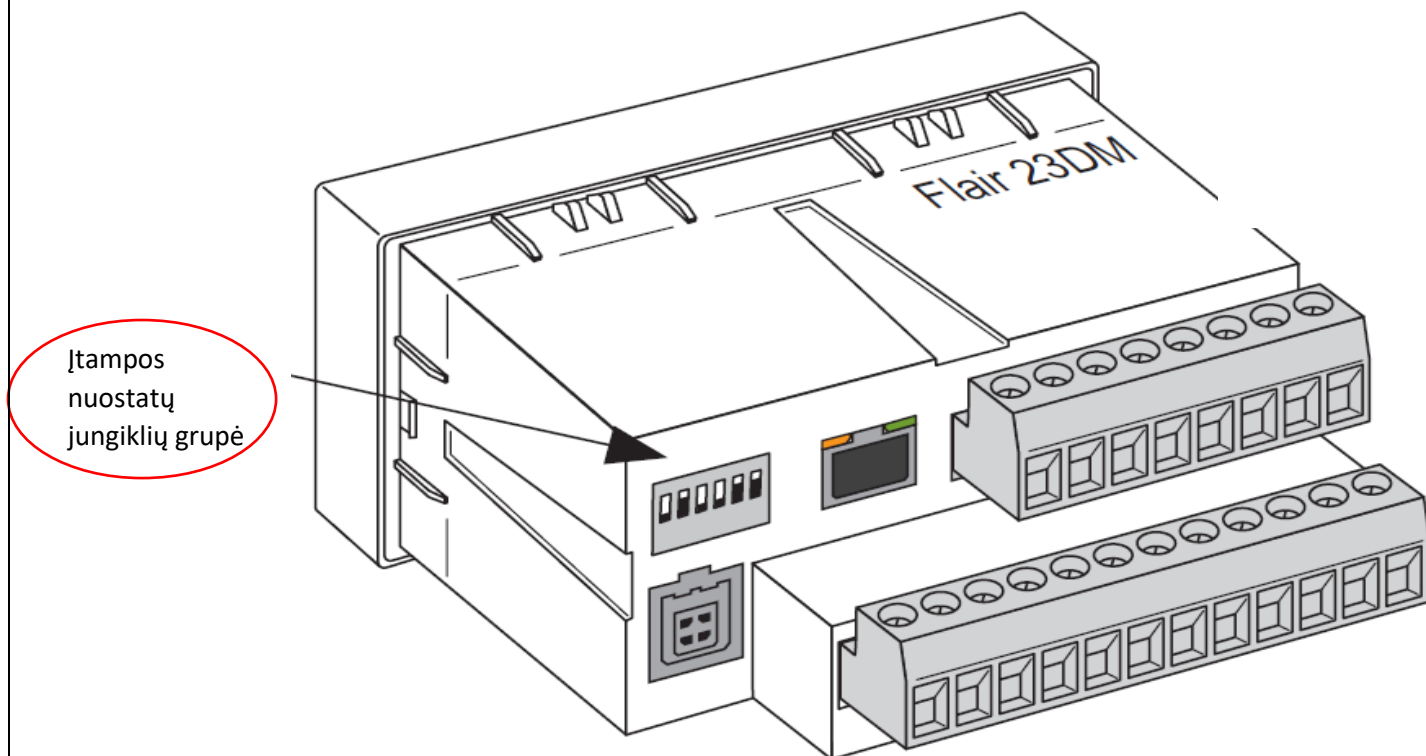
Puslapis 1 iš 7

Metodikos taikymas

Ši atmintinė taikoma trumpo jungimo indikatoriums, kurie tenkina Bendrovės techninius reikalavimus:

16.4 10 kV trumpojo jungimo indikatoriai kabelių tinklui su prijungimo prie TSPJ galimybe

Flair 23 DM indikatorių nustatymai:



Įtampos
nuostatų
jungiklių grupė

DIP1	DIP2	DIP3	DIP4	DIP5	DIP6
ON	ON	OFF	OFF	OFF	ON

Sw 1 <input checked="" type="checkbox"/> Direct output	Sw 1 <input type="checkbox"/> Inverted output	Sw 1 <input checked="" type="checkbox"/> Direct output	Sw 1 <input type="checkbox"/> Inverted output																																																																																																
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Standartinis nustatymas

Micro-switches settings

Sw 1 2 3 4 5 6

Sw 1: relay output = direct mode

Sw 2: type of measurement = line-to-neutral (V)

Sw 3, 4, 5: phases 1, 2, 3 = measured

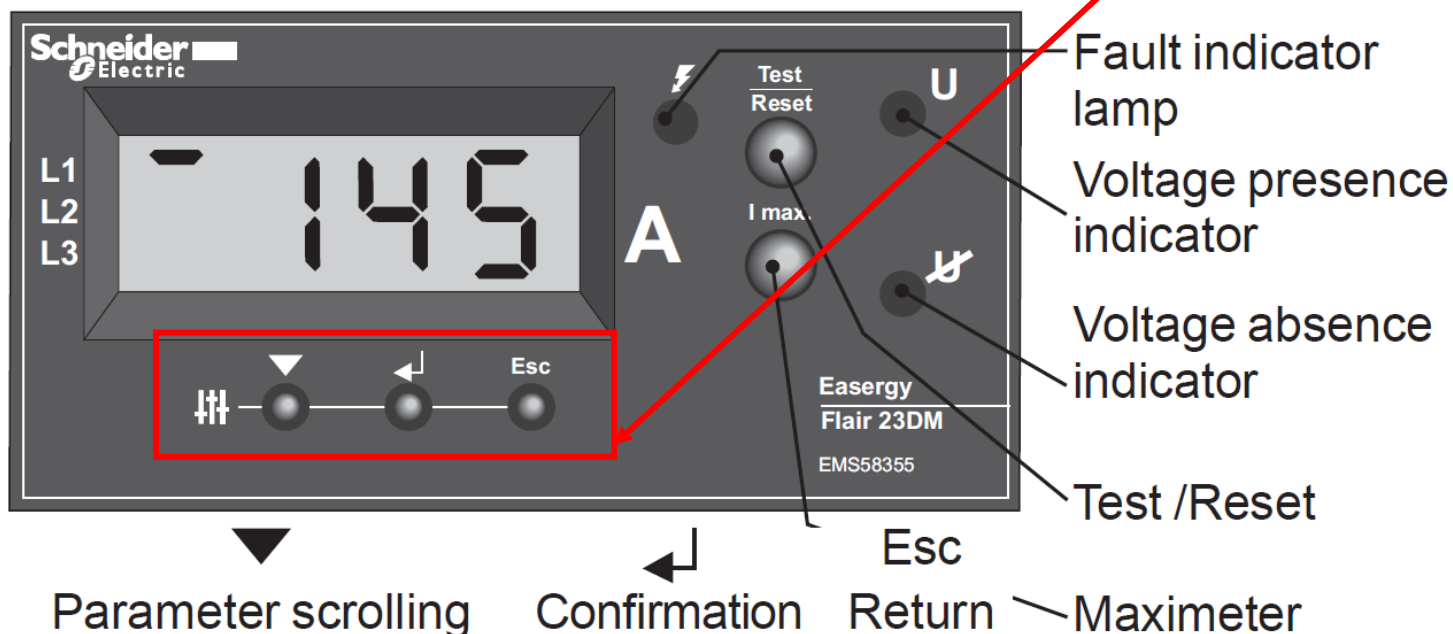
Sw 6: residual voltage = not measured



Kai visi jungikliai įjungti

įtampos matavimai neaktyvūs.

Flair 23 DM valdymo skydelis, visi parametrai gali būti nustatomi rankiniu būdu.



Šiuos nustatymus galima atlikti tik rankiniu būdu.

- Tinklo neutralės darbo režimas.
- Esamų srovės transformatorių konfigūracija.
- Srovės transformatorių tipas.

SEtd	Zero sequence threshold (Earth Fault) "I0 >" (A)	I _{max} threshold (OverCurrent) "I1 >" (A)	Type of neutral system	CT mounting 0 Phase CTs 1 Earth CT	CT type	Acknowledge time (ms) (Fault duration)	Inrush (s)	Automatic reset (s)	Fault VALIDation (s)	timer reset (h)
SEtd	EF	OC	ES	000	CT1	Fd	Inr	Ar	VAL	Er
	Type A Type B/C		Type A							
	(°)									
	20 5 100		En	000	CT1	40	OFF	OFF	OFF	1
	200 200 800		In	000	CT2	300	3	3	3	4
	or (+) or (°)		or	or (#)			or	or	or	to
	AUTO AUTO AUTO		Cn	0		60	70	70	70	24
	or or or									
	OFF OFF OFF									

Note: Fd setting value is 60 ms and cannot be modified while EF or OC threshold are on Auto mode.

Kompensuotos neutralės tinklas, Cn .

A tipo srovės transformatorių konfigūracija, 0 0 0 .

Srovės transformatorių tipas, CT1 .

- Rankiniu būdu nustatyti koks srovės transformatorių tipas naudojamas (CT1 ar CT2), bei koks srovės transformatorių prijungimas prie indikatoriaus. Parenkame (CT1, A type)

Connection of CTs to the 3 MV cables

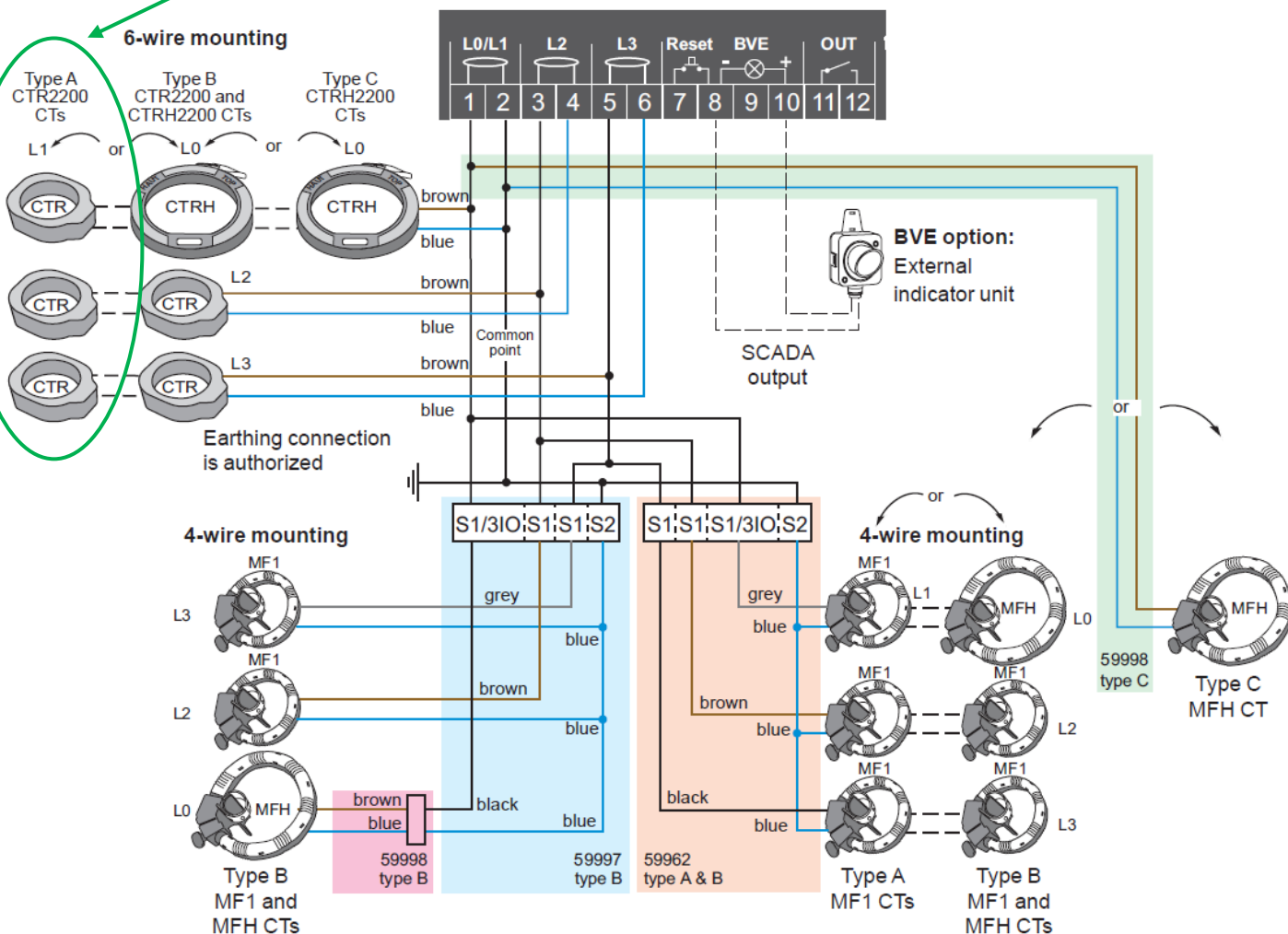
- Cross section: max. 1.5 mm²
- CTR2200/CTRH2200: mounting without common point, 6 wires (A or B or C type)
- MF1/MFH: mounting with or without common point, 4 or 6 wires (A or B or C type)

⚠ Important note :

- Mount the CTs in the right direction:
- For MF1/MFH2200 split core CTs:
Cable connector on the bottom
- For CTR2200 close CT:
red side of CT face to the busbar (bushing)
- Run the screen shield braid of the MV cable back inside the CT.

References

Type	Ref.	Product	Description
	EMS58355	Flair 23DM	Fault passage indicator
CT1	59925	CTR2200	Phase CT for RM6 cubicle bushing
	59926	CTRH2200	Earth CT (split toroidal core)
CT2	59963	MF1	Phase CT for cable (split toroidal core)
	59927	MFH2200	Earth CT (split toroidal core)
	59962	MF1 bundle or MFH	CT connector cable for 4-wire mounting (A or B type)
	59988	BVE	External indicator unit without battery
	59961	BVD	Tamper-proof lamp
	59967	LED	Flushed mounted light
	59998	IC30C	Cable 3m for MFH2200
	59997	MF1 bundle or MFH	CT connector cable for 4-wire mounting (B type)
EMS58422	CAB-EXT-1M-VPIS	VPIS-VO extended cable connection 1m	
EMS58423	CAB-EXT-2M-VPIS	VPIS-VO extended cable connection 2m	



Nuostatai taip pat gali būti keičiami ir nuotoliniu būdu.

Nustatoma maksimali išemėjimo I_0 srovės
jautrumo reikšmė (200A)

Jungiamo prie 10 kV elektros tinklo maitinamo
iš transformatorių pastotės ar skirstomojo
punkto, ir maitinimo taške 10 kV šynose
trumpojo jungimo srovė yra ≤ 3 kA, nustatyti
200 A, jei > 3 kA 600 A;

Address Dec.	Address Hexa.	Description	Format	Unit	Range	Default value	Access
7680 to 7683	1E00h to 1E03h	Last setting change date	IEC Date-time	ms	Reading only	-	R
7684	1E04h	Phase fault threshold " $I>$ "	16S	A	100 to 800A or Auto-mode or OFF	Auto-mode	R/W
7685	1E05h	Earth fault threshold " $I_0>$ "	16S	A	5 to 200A (1) or Auto-mode or OFF	Auto-mode	R/W
7686	1E06h	Fault duration	16S	ms	40 to 300ms	60ms	R/W
7687	1E07h	Fault validation time	16S	s	3s, 70s, OFF	70 s	R/W
7688	1E08h	Inrush filtering time	16S	s	3s, 70s, OFF	3s	R/W
7689	1E09h	Automatic fault indication reset on voltage return	16S	s	3s, 70s, OFF	70 s	R/W
7690	1E0Ah	Maximum delay before to reset the fault indication	16S	h	2, 4, 8, 12, 16 or 24h	4h	R/W
7691	1E0Bh	Phase Voltage presence threshold	16S	%	40 to 90 % (10% step)	80	R/W
7692	1E0Ch	Residual Voltage presence threshold	16S	%	30 to 60 % (10% step)	30	R/W
61987	F223h	Delay for R1 relay activation on voltage return (T11)	16S	ms	0 (0 s) 1 to 9 / incr.=1 (0,1s to 1s) 10 to 210 / incr.=20 (1s to 21s) 600 to 6000 / incr.=600 (1mn to 10mn) 9000 (15mn) + FFFFh (OFF)	1 (0,1s)	R/W
7694	1E0Eh	Delay for R1 relay release on voltage loss (T12)	16S	ms	0 to 1s (0,1s step) 1 to 3s (0,5s step)	0,1s	R/W
7695	1E0Fh	Voltage absence threshold	16S	%	10 to 30 % (10% step)	20	R/W
61989	F225h	Delay for R2 relay activation on voltage loss (T21)	16S	ms	0 (0 s) 1 to 9 / incr.=1 (0,1s to 1s) 10 to 210 / incr.=20 (1s to 21s) 600 to 6000 / incr.=600 (1mn to 10mn) 9000 (15mn) + FFFFh (OFF)	1 (0,1s)	R/W
7697	1E11h	Delay for R2 relay release on voltage return (T22)	16S	ms	0 to 1s (0,1s step) 1 to 3s (0,5s step)	0,1s	R/W
7698	1E12h	Auto calibration (2)	16S Boolean	-	0 = inactive 1 = active	Inactive	R/W

(1) : 3 phases CTs mounting: 20 to 200A. 2 phases CTs + zero sequence CT mounting: 5 to 200A.

(2) : If active, the Auto calibration is performed at each return of LV supply.

