

72.5 kV DISCONNECTING SWITCH GUARANTEED TECHNICAL DATA

19.11.2012

	EMEK REF. NO. : 110223 REV.0	UNIT	ITEM 1
1	MANUFACTURER	-	EMEK ELEKTRİK ENDÜSTRİSİ A.Ş.
2	STANDARDS	-	IEC 62271-102
3	MANUFACTURER'S TYPE DESIGNATION	-	DR-72.5-EM
4	CONSTRUCTIONAL TYPE OF CONNECTION	-	Double Rotating, Center Break, Horizontal opening
5	NUMBER OF POLES	-	3
6	NUMBER OF BLADE PER POLE	-	2
7	NUMBER OF MOVABLE COLUMN PER POLE	-	2
8	NUMBER OF EARTH BLADES PER POLE	-	1
9	RATED FREQUENCY	Hz	50
10	RATED VOLTAGE	kV	66
11	HIGHEST SYSTEM VOLTAGE	kV	72.5
12	RATED NORMAL CURRENT	A	800
13	RATED SHORT TIME CURRENT	kArms	31.5
14	RATED DURATION OF SHORT CURRENT	sec	1
15	RATED PEAK SHORT CIRCUIT CURRENT	kApeak	2.5xIth
16	MAIN CIRCUIT TERMINALS	-	Ø 40 x 80
17	MINIMUM CREEPAGE DISTANCE OF INSULATORS	mm/kV	25
18	FULL WAVE (1.2/50 ms) IMPULSE WITHSTAND VOLTAGE OF INSULATORS: TO EARTH ACROSS ISOLATING DISTANCE	kVpeak kVpeak	325 375
19	ONE MINUTE POWER FREQUENCY (50-CYCLE) WITHSTAND VOLTAGE (WET) OF INSULATORS: TO EARTH ACROSS ISOLATING DISTANCE	kVrms kVrms	140 160
20	TYPE OF OPERATION OF MAIN SWITCH (MOTOR / HAND)	-	MOTOR/HAND
21	TYPE OF OPERATION OF EARTH SWITCH (MOTOR / HAND)	-	HAND
22	MOTOR SUPPLY VOLTAGE (V) POWER CONSUMPTION (W)	V _{dc} W	110 370
23	DC CONTROL VOLTAGE	V	110
24	NUMBER OF AUXILIARY CONTACTS FOR EACH PHASE FOR MAIN SWITCH		11NO - 11NC
25	NUMBER OF AUXILIARY CONTACTS FOR EACH PHASE FOR EACH EARTHING SWITCH		4NO - 4NC
26	DRAWING NO		EHYGA-S105

Altitude is 3500 m. Insulation level is arranged according to altitude. (123/230/450 kV)

Prepared by
EMEK ENGINEERING DEPARTMENT

Prepared by
KORHAN SERDAR


emek
ELEKTRİK ENDÜSTRİSİ A.Ş.
KARAKÖY

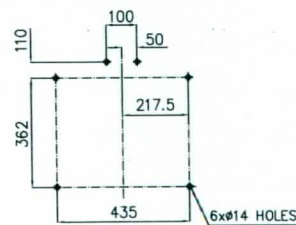
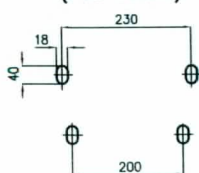
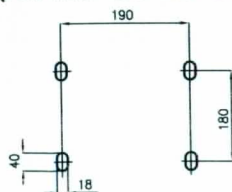
72.5 kV DISCONNECTING SWITCH GUARANTEED TECHNICAL DATA

19.11.2012

	EMEK REF. NO. : 110223 REV.0	UNIT	ITEM 2
1	MANUFACTURER	-	EMEK ELEKTRİK ENDÜSTRİSİ A.Ş.
2	STANDARDS	-	IEC 62271-102
3	MANUFACTURER'S TYPE DESIGNATION	-	DR-72.5-NM
4	CONSTRUCTIONAL TYPE OF CONNECTION	-	Double Rotating, Center Break, Horizontal opening
5	NUMBER OF POLES	-	3
6	NUMBER OF BLADE PER POLE	-	2
7	NUMBER OF MOVABLE COLUMN PER POLE	-	2
8	NUMBER OF EARTH BLADES PER POLE	-	-
9	RATED FREQUENCY	Hz	50
10	RATED VOLTAGE	kV	66
11	HIGHEST SYSTEM VOLTAGE	kV	72.5
12	RATED NORMAL CURRENT	A	800
13	RATED SHORT TIME CURRENT	kArms	31.5
14	RATED DURATION OF SHORT CURRENT	sec	1
15	RATED PEAK SHORT CIRCUIT CURRENT	kA _{peak}	2.5xI _{th}
16	MAIN CIRCUIT TERMINALS	-	Ø 40 x 80
17	MINIMUM CREEPAGE DISTANCE OF INSULATORS	mm/kV	25
18	FULL WAVE (1.2/50 ms) IMPULSE WITHSTAND VOLTAGE OF INSULATORS: TO EARTH ACROSS ISOLATING DISTANCE	kV _{peak} kV _{peak}	325 375
19	ONE MINUTE POWER FREQUENCY (50-CYCLE) WITHSTAND VOLTAGE (WET) OF INSULATORS: TO EARTH ACROSS ISOLATING DISTANCE	kV _{rms} kV _{rms}	140 160
20	TYPE OF OPERATION OF MAIN SWITCH (MOTOR / HAND)	-	MOTOR/HAND
21	TYPE OF OPERATION OF EARTH SWITCH (MOTOR / HAND)	-	-
22	MOTOR SUPPLY VOLTAGE (V) POWER CONSUMPTION (W)	V _{dc} W	110 370
23	DC CONTROL VOLTAGE	V	110
24	NUMBER OF AUXILIARY CONTACTS FOR EACH PHASE FOR MAIN SWITCH		8NO - 8NC
25	NUMBER OF AUXILIARY CONTACTS FOR EACH PHASE FOR EACH EARTHING SWITCH		-
26	DRAWING NO		EHYGA-S107

Altitude is 3500 m. Insulation level is arranged according to altitude. (123/230/450 kV)

Prepared by EMEK ENGINEERING DEPARTMENT	Prepared by KORHAN SERDAR	
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VOLTAGE LEVEL	120	125	145	170	245
A	1700	2000	2500	3000	4000
B	1200	1450	1850	1950	2700
C	770	1220	1500	1700	2300
D	300	750	750	900	1620
E	660	1110	1110	1130	1980
F*	950	1200	1400	1700	2050




" F " ROW IS GIVEN FOR THE MAX.VALUE OF SUPPORTING STRUCTURE

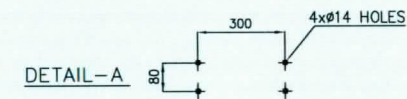
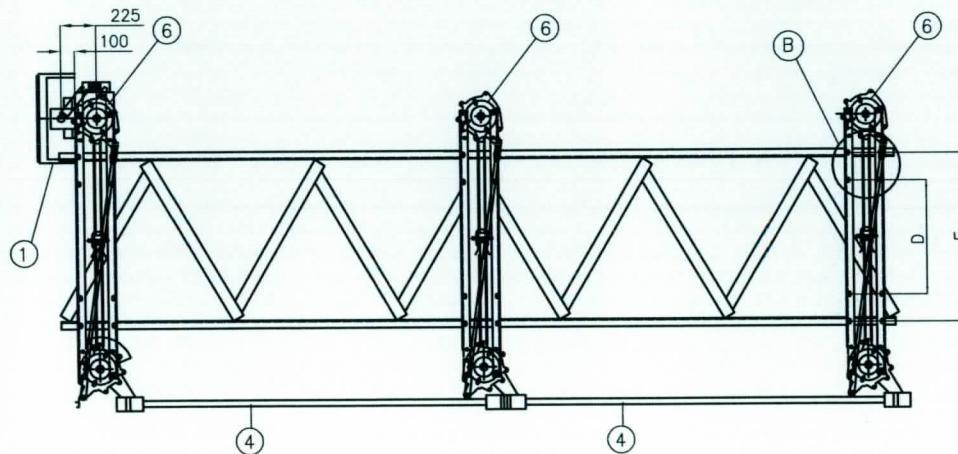
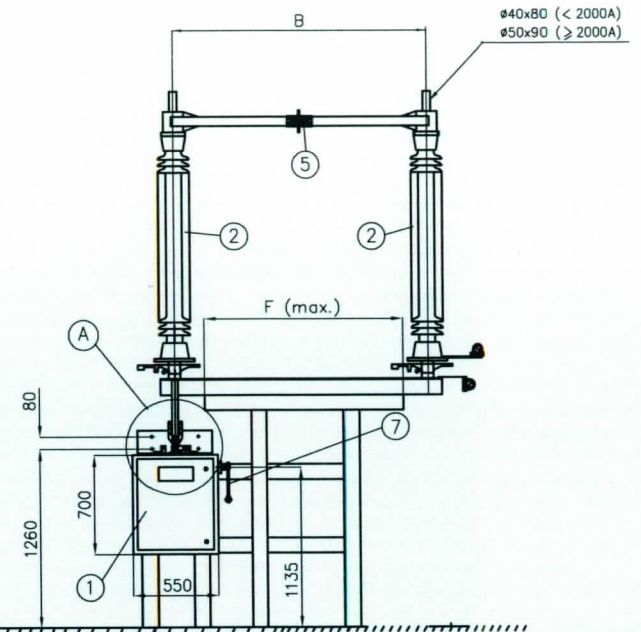
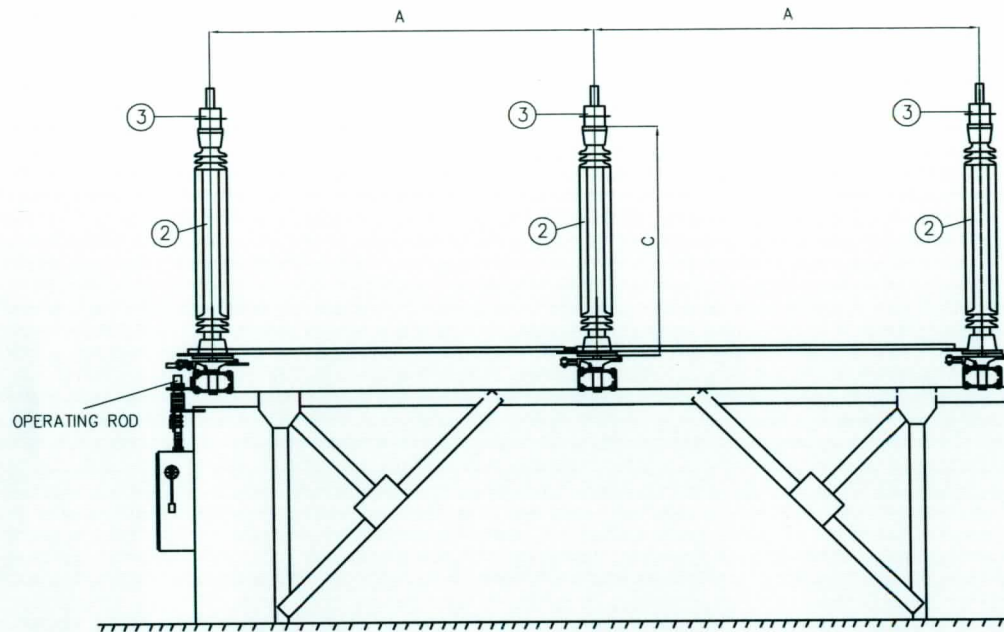
NOTE:

- * SUPPORT STRUCTURE IS NOT INCLUDED.
- * UNLESS OTHERWISE STATED, 1.45 m. OPERATING ROD WILL BE SUPPLIED

12	MANUAL OPERATING LEVER
11	EARTH BLADE LEVER
10	BASE OF INSULATOR
9	CONNECTION PIPE FOR EARTH (1 1/4")
8	GROUNDING BLADE SOCKET
7	MAIN BLADE SOCKET
6	CONNECTION PIPE FOR DISCONNECTOR (1 1/4")
5	EARTHING BLADE
4	TERMINAL BASE
3	INSULATOR
2	MANUAL OPERATING BOX OF GROUNDING BLADE
1	MAIN CONTROL BOX
ITEM NO	PART NAME

EE-GN-FR-M-009 REV3

7	23/10/12	170kV DETAIL B IS SHOWN.			TITLE: MOTOR OPERATED DISCONNECTOR WITH EARTHING BLADE DRAWING / STOCK NO : EHYGA-S105
REV	DATE	REVISION		APPROVED	
		NAME	DATE	SING	
				SCALE	
DESIGNED BY	I.SEVEN	05/05/04		NTS	
DRAWN BY	C.GUMUSBOGA	05/05/04			
APPROVED BY	G.ELIS	05/05/04			
 EMEK ELEKTRİK ENDUSTRİSİ A.Ş.					PAGE 1



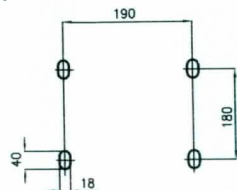
72.5

VOLTAGE LEVEL	125	145	170	245
A	1700	2000	2500	3000
B	1200	1450	1650	1950
C	770	1220	1500	1700
D	300	750	750	900
E	660	1110	1110	1130
F*	950	1200	1400	1700

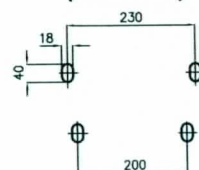
7	MANUAL OPERATING LEVER
6	BASE OF INSULATOR
5	MAIN BLADE SOCKET
4	CONNECTION PIPE FOR DISCONNECTOR (1 1/4")
3	TERMINAL BASE
2	INSULATOR
1	MAIN CONTROL BOX
ITEM NO	PART NAME

EE-GN-FR-M-009 REV3

DETAIL-B
(FOR 72.5-125-145-245kV)



DETAIL-B
(FOR 170kV)



" F " ROW IS GIVEN FOR THE MAX.VALUE OF SUPPORTING STRUCTURE

NOTE:

- * SUPPORT STRUCTURE IS NOT INCLUDED.
- * UNLESS OTHERWISE STATED, 1.45 m. OPERATING ROD WILL BE SUPPLIED

7	23/10/12	170kV DETAIL B IS SHOWN.	APPROVED	TITLE:
REV	DATE	REVISION	SCALE	MOTOR OPERATED DISCONNECTOR
		NAME DATE SING	NTS	
DESIGNED BY	I.SEVEN	05/05/04		
DRAWN BY	C.GUMUSBOGA	05/05/04		
APPROVED BY	G.ELIS	05/05/04		
emek	EMEK ELEKTRIK			DRAWING / STOCK NO :
	ENDUSTRİSİ A.Ş.			EHYGA-S107
				PAGE
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