
PAJOOHANDEH NIROO
150mm
200mm

Description	SET OF MAIN CONTACTS FOR CONTACTOR TYPE: HSS1000 (SET=1FIXED + 1 MOVABLE)

Material Code	406050130063A	**PU**	7
TYPE	.	**ZONE**	110
Drawing No.	G.C	**IT Code**	7 80 11M0102 FRGR910 000002
Drawing .Pos	.	**QCTM No.**	RDSN406050130063

1*- Type: Main Contact
2*- Work For : contactor HSS1000
3- Set: 1fixed + 1 Movable
4- Mounting: ☐Flush ☑Back Case Fix Of Panel ☐Forward Case Fix Of Panel ☐ Angle Ca e Fix Of Panel
5-Weight: ……0.4.....…..Kg

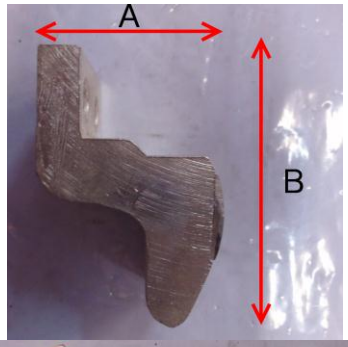
6*- Manufacturers

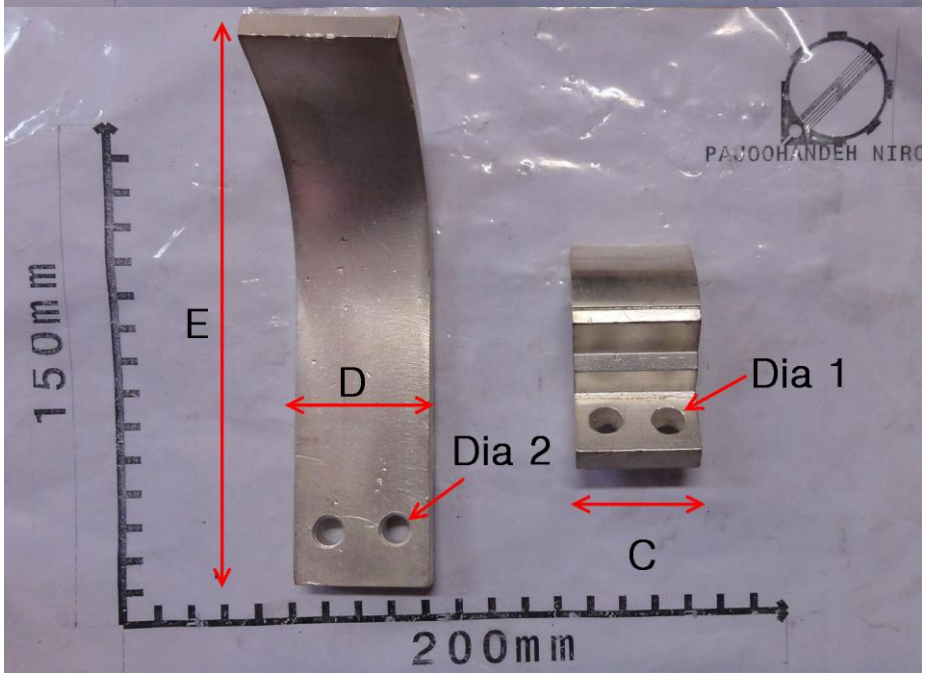
Manufacturer	Part No/Type:
AEG ITALIANA S.P.A	**.**

7*- Similar Type Material Codes:

Material Code	Manufacturer	Part No/Type:

8- Note :





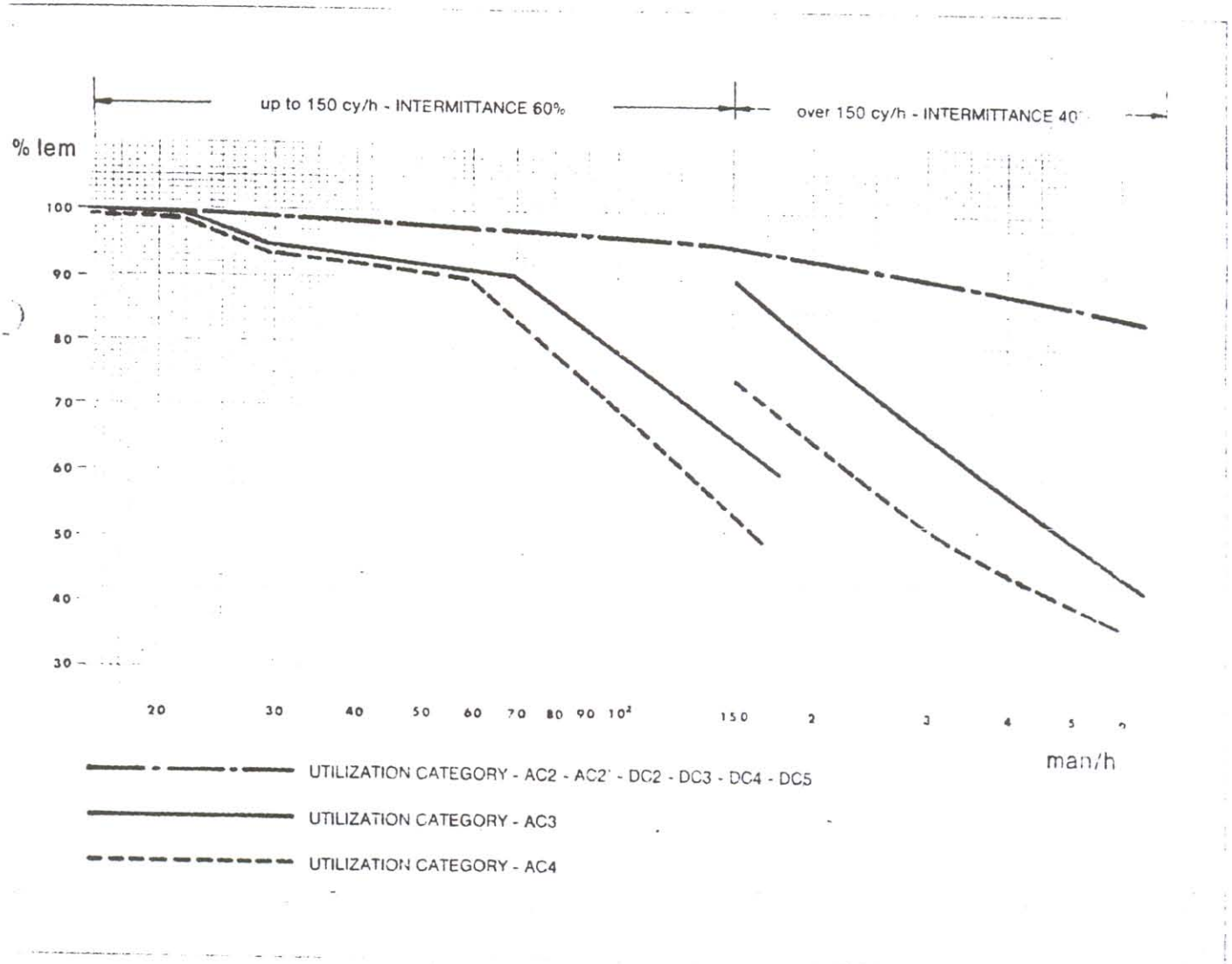
Dimension (mm)									
A	B	C	D	E	F	Dia1	Dia2	T1	T2
40	60	36	40	154	55	9	8	10	8

RATINGS FOR CONTROL OF MOTORS

(Table n. 4)

TYPE HSS	A.C. motors								D.C. motors	
	Utilization category AC2 & AC3				Utilization category AC4				Max. operational curr. Iem [A]	
	Maximum operational current Iem [A]	Max. operational power [kw]			Maximum operational current Iem [A]	Max. operational power [kw]			CAT. DC2-DC3 220V-1 Pole 600V-2 Poles	CAT. DC4-DC5 220V-1 Pole 600V-2 Poles
		220 V	380 V	500 V		220 V	380 V	500 V		
N 46	43	12	21	27	40	12	20	24	43	40
N 60	56	16	28	36	50	15	25	30	56	50
N 85	80	23	40	52	75	22	38	45	80	75
N 125	110	32	55	72	95	28	48	57	110	95
N 190	180	52	90	118	170	50	85	100	180	170
N 270	250	72	125	164	210	61	105	124	250	210
N 350	320	92	160	210	270	79	136	160	320	270
N 550	500	145	250	328	450	130	227	270	500	450
N 650	600	173	300	394	550	160	278	330	600	550
N 800	750	220	380	500	650	190	330	390	750	650
N 1000	900	260	450	590	800	235	405	480	900	800
N 1250	1100	320	550	720	1000	300	510	600	1100	1000
N 1600	1400	400	700	920	1250	365	630	746	1400	1250
N 2000	1800	520	900	1180	1600	470	810	960	1800	1600
N 3000	2500	720	1250	1640	2250	660	1140	1350	2500	2250

The above ratings are the maximum permissible for normal duty with reference to the making and breaking capacity stated by the I.E.C. standard N. 158-1.
The maximum operational current Iem is referred to a class of intermittant duty up to 20 operating cycles per hour. For intermittant duty higher than 20 cy/h, the curves below give the corresponding derating.



ELECTRICAL CHARACTERISTICS

General Ratings

The table below gives the general performances and ratings of the contactors, with reference to the requirements of Standard CEI 252 and the Recommendation IEC 158-1. The A.C. breaking capacity given is the R.M.S. value of the symmetrical component of the current and the making capacity given is the peak value of the total asymmetrical current.

(Table n. 2)

Contactor Type	Ith [A]	Breaking capacity A.C. cos φ = 0,5 I'ca [A] RMS value 440 V	750 V	1000 V	D.C. L/R = 15 ms I' cc [A] 220 V	440 V	660 V	Making capacity Ich [A]	Consumption of coils A.C. [VA] Pick-up	Holding	D.C. [W] Pick-up	Holding	Operation time (m sec.) Closing	Opening	Mech. endurance in million operations
N 46	46	900	400	350	1000	500	400	1500	220	38	100	10	28	10	15
N 60	60	1200	500	400	1200	650	500	2000	220	38	100	10	28	10	15
N 85	85	1600	700	600	1700	1000	800	2750	350	50	110	15	26	13	15
N 125	125	2100	1000	900	2500	1500	1000	3500	450	60	130	15	23	13	15
N 190	190	2500	1600	1300	3000	2000	1400	4200	450	60	130	15	23	12	15
N 270	270	4300	2500	2000	4500	3000	2500	7000	1300	110	180	12	30	18	15
N 350	350	4800	3000	2500	5000	3500	3000	8500	1300	110	180	12	30	18	15
N 550	550	6000	4500	3900	7000	5000	4000	10000	1500	110	300	20	65	15	15
N 650	650	8000	5500	4500	9000	6000	5000	12000	–	–	300	20	65	15	10
N 800	800	9500	6500	6000	10000	7000	6000	16000	–	–	650	30	80	16	10
N 1000	1000	12500	8000	7000	13000	9000	7500	21000	–	–	650	30	80	16	10
N 1250	1250	15000	10000	9000	16000	12000	10000	30000	–	–	1000	50	90	10	10
N 1600	1600	20000	15000	10000	25000	16000	12000	35000	–	–	1000	50	95	11	10
N 2000	2000	20000	15000	10000	30000	20000	15000	35000	–	–	1000	50	95	11	10
N 3000	3000	30000	15000	10000	35000	25000	18000	50000	–	–	1500	80	90	10	10
N 4000	4000	35000	20000	10000	40000	30000	20000	50000	–	–	1500	80	90	10	10
N 6000	6000	40000	20000	10000	40000	35000	20000	80000	–	–	2500	100	90	10	10

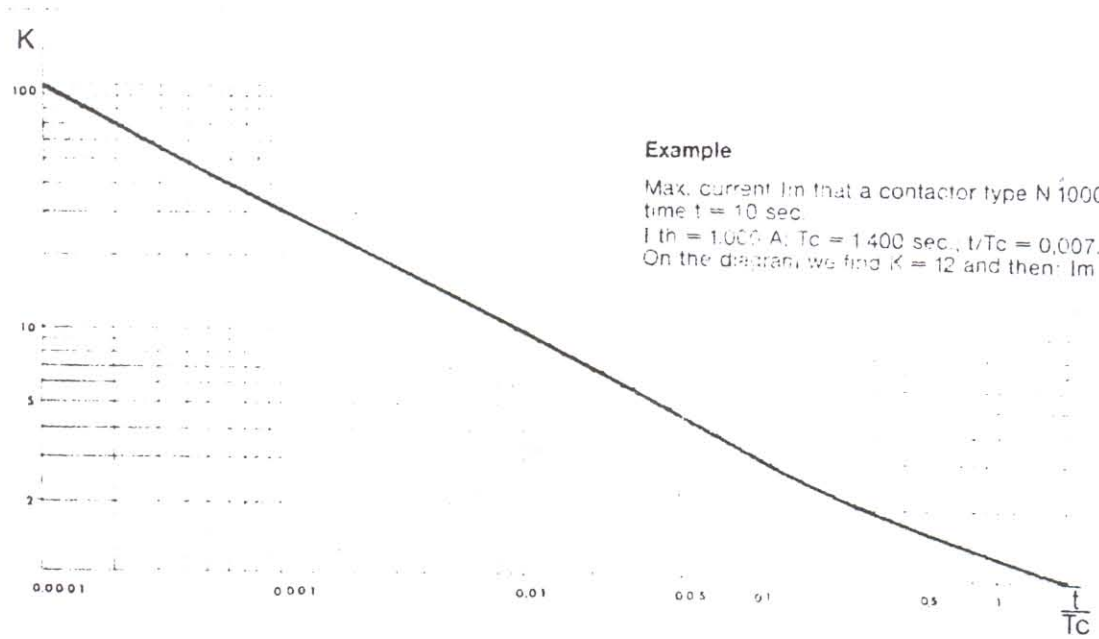
OVERLOAD CAPABILITY OF CONTACTORS

The contactors can withstand for short time durations, current much higher than the rated; in this instance two different phenomena must be considered: the thermal and the electrodynamic.
Dynamically the contactors can withstand current peaks to a limit where repulsion of the contacts may occur.
The current which causes the repulsion of the contacts could be higher than the making capacity of the contactor as it is considered that this phenomenon arises when the contactor is already closed and operating.
Therefore, the electrodynamic stress in this case is not superimposed to the mechanical bounce effect that can arise during the closing operation which is the principal cause of the contacts melting.

Of course, the intensity of this dynamic current must also be thermally tolerable for the contactor and therefore, in the table below, the values "Id" of the maximum acceptable dynamic currents are given providing that their duration is no more than 100 ms.
From the thermal point of view the intensity of the tolerable overload is inversely proportional to the duration and depends essentially upon the time constant Tc of the warming-up curve of the contactor when its rated current is applied.
The diagram below gives the ratio t/Tc (where t is the duration of the overload) and the factor K which, when applied to the nominal current of the contactor, determines the intensity of the tolerable overload.

(Table n. 3)

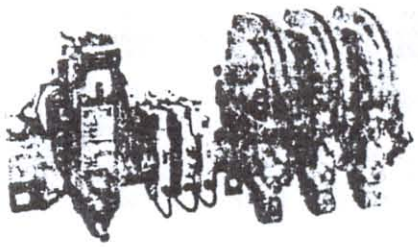
Contactor Type N			46	60	85	125	190	270	350	550	650	800	1000	1250	1600	2000	3000
Id (Peak val.)	KA		2,5	2,5	3,5	4,5	5,5	9	11	13	15	20	29	40	40	40	55
Tc	sec.		1500	1500	2150	1200	1500	2150	1300	2000	1500	1500	1400	1500	1800	2100	2100

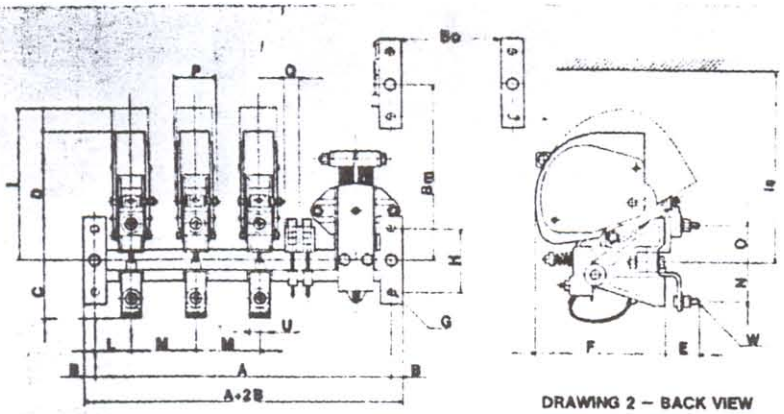


Example

Max. current Im that a contactor type N 1000 can withstand for a time t = 10 sec.
I th = 1.000 A; Tc = 1.400 sec.; t/Tc = 0,007.
On the diagram we find K = 12 and then: Im = K I th = 12 x 1.000 = 12.000 A.

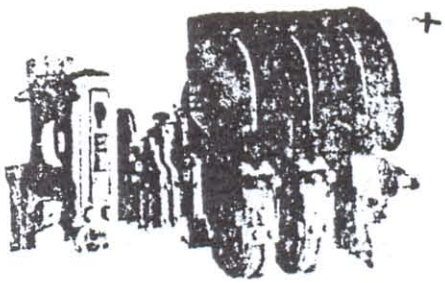
CONTACTORS TYPE
N 85 - N 125 - N 190 - N 270 - N 350
N 550 - N 650

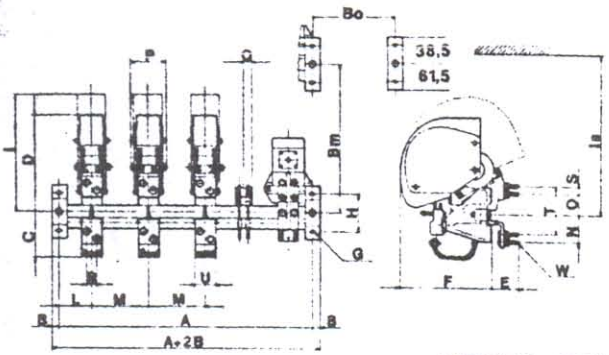




DRAWING 2 – BACK VIEW

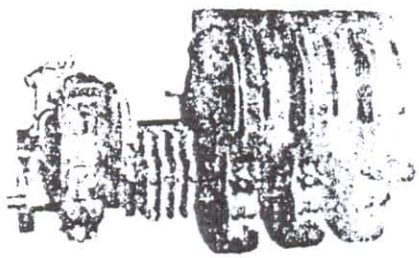
CONTACTORS TYPE N 800 - N 1000

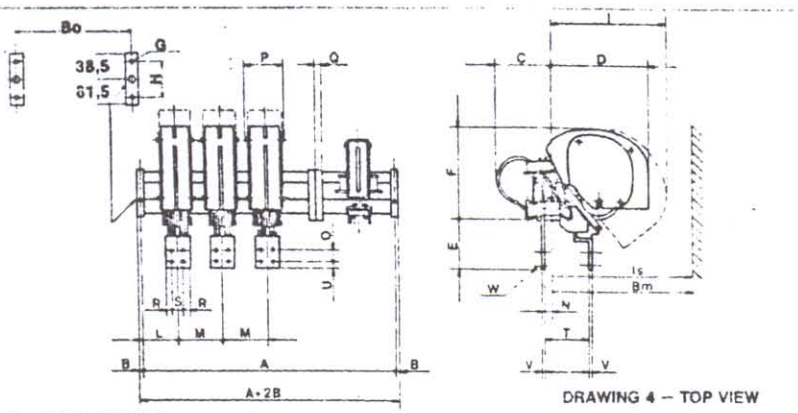




DRAWING 3 – BACK VIEW

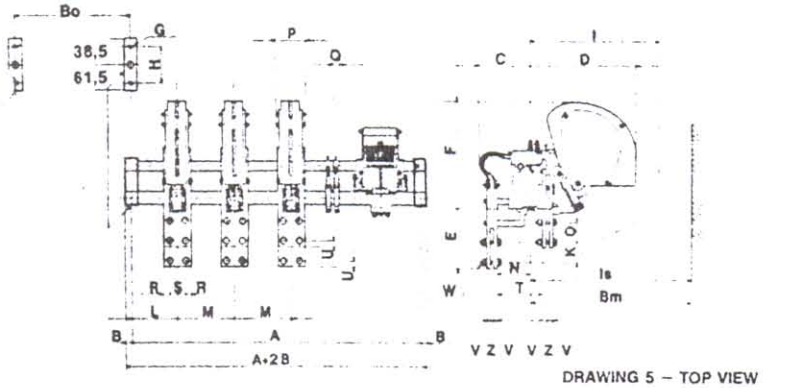
CONTACTORS TYPE N 1250





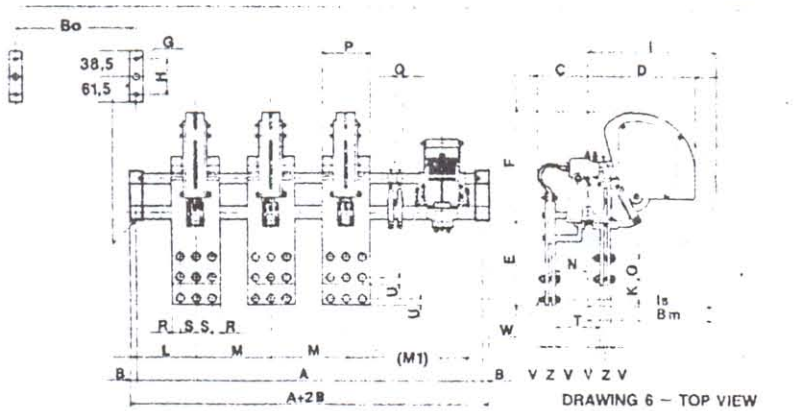
DRAWING 4 – TOP VIEW

CONTACTORS TYPE N 1600 - N 2000



DRAWING 5 – TOP VIEW

CONTACTORS TYPE N 3000



DRAWING 6 – TOP VIEW

Four-pole execution is made with magnet at centre between ... All dimensions remain unchanged and the clearance L ... measure for each end of contactor. Distance between centre ... magnets opposite sides is: M1 = 450 mm.

Overall dimensions of contactors (mm.)

(Table n.

Type M S S	Drawing N.	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S	T	U	V	W	Z	K	Bm*	Is*	Bo*
N 46	1	10	55	70	15	90	6,5	20	85	37	38	28	28	28	14	–	–	–	–	–	–	–	–	200	130	–
N 60		10	55	80	15	95	6,5	20	90	37	36	28	28	28	14	–	–	–	–	–	–	–	–	200	130	–
N 85	2	12,5	60	105	35	120	8	60	130	55	50	46	40	38	18	–	–	–	18	–	M6	–	–	220	155	–
N 125		12,5	60	115	35	120	8	60	130	55	50	46	40	44	18	–	–	–	18	–	M6	–	–	220	155	–
N 190		12,5	70	135	40	130	8	60	150	60	60	48	42	49	18	–	–	–	20	–	M8	–	–	220	185	–
N 270		13	95	170	45	170	8	80	195	60	70	57	50	55	18	–	–	–	25	–	M8	–	–	300	240	110
N 350		13	95	180	45	170	8	80	200	60	70	57	50	65	18	–	–	–	25	–	M8	–	–	300	245	11
N 550		13	105	195	70	190	8	80	230	70	90	70	52	70	18	–	–	–	40	–	M12	–	–	360	265	11
N 650		13	120	200	70	190	8	80	230	70	90	70	52	75	18	–	–	–	40	–	M12	–	–	360	270	110
N 800	3	35	120	245	75	225	8	100	300	80	100	70	47	85	18	25	18	117	50	–	M10	–	–	440	345	16
N 1000		35	120	245	75	225	8	100	300	80	100	70	47	85	18	25	18	117	50	–	M10	–	–	440	345	16
N 1250	4	35	135	245	120	225	8	100	300	80	110	25	30	100	18	15	30	105	15	10	M8	–	–	440	345	165
N 1600	5	35	135	280	145	275	8	100	330	80	120	92	50	82	18	15	40	125	15	8	M10	10	50	500	380	16
N 2000		35	135	280	145	275	8	100	330	85	130	92	50	92	18	15	40	125	20	8	M10	10	50	500	380	165
N 3000	6	35	135	280	195	275	8	100	330	105	170	92	50	133	18	15	40	125	20	8	M10	10	50	500	380	16

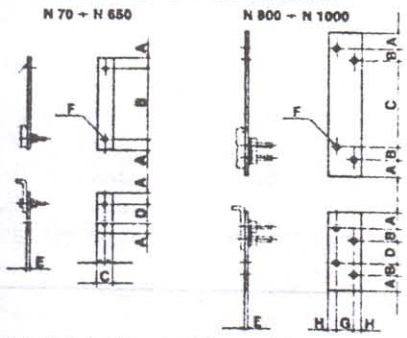
*Bm = Distance needed for vertical mechanical interlock.
*Is = Minimum clearance between contactor and earthed frame.

Overall dimensions of accessories (mm.)

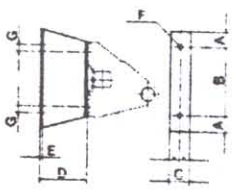
(Table

Type M S S	Drawing N.	Accessories for front connection								Accessories for plate mounting						
		A	B	C	D	E	F	G	H	A	B	C	D	E	F	G
N 46/60	0	10	60	12	30	3	5,25	–	–	–	–	–	45	–	–	–
N 85		10	100	18	40	4	6,25	–	–	12,5	100	30	65	3	8	20
N 125		10	100	18	40	4	6,25	–	–	12,5	100	30	65	3	8	20
N 190		10	100	20	40	4	8,25	–	–	12,5	100	30	80	3	8	20
N 270		15	140	25	50	5	8,25	–	–	15	120	30	80	3	8	20
N 350		15	140	25	50	5	8,25	–	–	15	120	30	80	3	8	20
N 550		20	170	40	65	6	12,5	–	–	15	120	30	100	3	8	20
N 650		20	170	40	65	6	12,5	–	–	15	120	30	100	3	8	20
N 800		15	18	180	70	8	10,5	25	12,5	20	140	30	110	4	10	20
N 1000		15	18	180	70	8	10,5	25	12,5	20	140	30	110	4	10	20

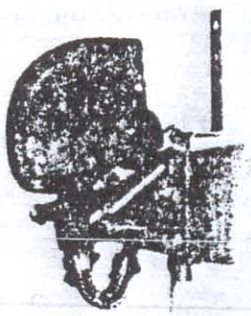
ACCESSORIES FOR FRONT CONNECTION
N 70 ÷ N 650 N 800 ÷ N 1000

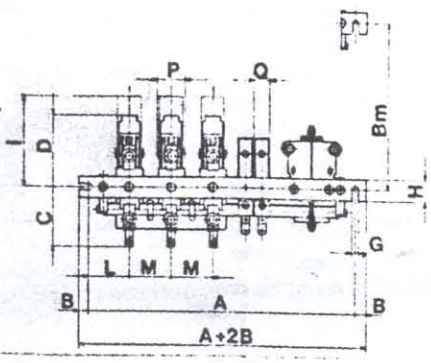


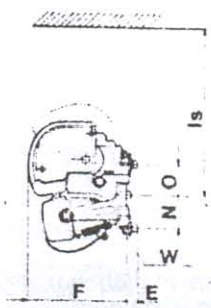
ACCESSORIES FOR PLATE MOUNTING
FOR N 70 ÷ N 1000



DRAWING 0 – ACCESSORIES

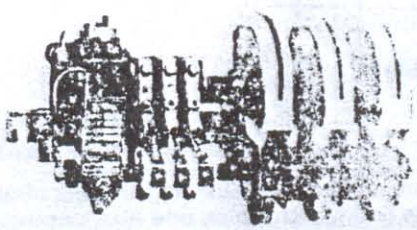






DRAWING 1 – BACK VIEW

CONTACTORS TYPE N 46 - N 60



Distance "A" between the fastening bolts (mm.)

RT1.75-76 3362/98

(Table n. 8)

Contactor Type	Auxiliary contacts arrangement	1 POLE CONTROL		2 POLES CONTROL		3 POLES CONTROL		4 POLES CONTROL	
		A.C.	D.C.	A.C.	D.C.	A.C.	D.C.	A.C.	D.C.
N 46 N 60	1P / 2P	155	185	205	205	230	260	290	290
	3P / 1T	185	185	205	230	260	260	290	310
	4P / 1P+1T	185	205	230	260	260	290	310	310
	5P / 2P+1T	205	230	260	260	290	290	310	–
	6P / 3P+1T / 2T	230	230	260	290	290	310	–	–
	7P / 4P+1T / 2T	230	260	290	290	310	–	–	–
N 85 N 125	0	200	200	250	250	300	300	350	350
	1P	200	250	250	300	300	350	350	400
	2P / 1T / 1B	250	250	300	300	350	350	400	400
	3P / 1P+1T / 1P+1B	250	250	300	300	350	350	400	400
	4P / 2P+1T / 2P+1B / 1B+1T	250	300	300	350	350	400	400	450
	5P / 3P+1T / 1P+2T / 3P+1B / 3P+1T+1B	300	300	350	350	400	400	450	450
	6P / 4P+1T / 2P+2T / 3T / 4P+1B / 1P+1T+1B	300	350	350	400	400	450	450	–
N 190	0	200	200	250	300	300	350	400	400
	1P	200	250	300	300	350	350	400	400
	2P / 1T / 1B	250	250	300	300	350	400	400	450
	3P / 1P+1T / 1P+1B	250	300	300	350	400	400	450	450
	4P / 2P+1T / 2P+1B / 1B+1T	300	300	350	350	400	400	450	450
	5P / 3P+1T / 1P+2T / 3P+1B / 3P+1T+1B	300	300	350	350	400	450	450	–
	6P / 4P+1T / 2P+2T / 3T / 4P+1B / 1P+1T+1B	300	350	350	400	450	450	–	–
N 270 N 350	0	250	250	300	300	350	400	450	450
	1P	250	250	300	350	400	400	450	500
	2P / 1B / 1T	250	300	350	350	400	450	500	500
	3P / 1P+1B / 1P+1T	300	300	350	400	450	450	500	500
	4P / 2B+2T / 2P+1B / 2P+1T / 1B+1T	300	350	400	400	450	450	500	550
	5P / 1P+2B / 1P+2T / 3P+1B / 3P+1T / 1P+1B+1T	350	350	400	400	450	500	550	550
N 550 N 650	0	250	250	350	350	450	450	550	
	1P	250	300	350	400	450	450	550	
	2P / 1B / 1T	300	300	400	400	450	500	600	
	3P / 1P+1B / 1P+1T	300	350	400	400	500	500	600	
	4P / 2B / 2T / 2P+1B / 2P+1T / 1B+1T	350	350	400	450	500	550	600	
	5P / 1P+2B / 1P+2T / 3P+1T / 1P+1B+1T	350	350	450	450	500	550	–	
N 800 N 1000	0	300		400		500		600	
	1P	300		400		500		600	
	2P / 1B / 1T	350		450		550		650	
	3P / 1P+1B / 1P+1T	350		450		550		650	
	4P / 2B / 2T / 2P+1B / 2P+1T / 1B+1T	400		500		600		700	
	5P / 1P+2B / 1P+2T / 3P+1B / 3P+1T / 1P+1B+1T	400		500		600		–	
N 1250	0	300		400		550		650	
	1P	300		450		550		650	
	2P / 1B / 1T	350		450		550		650	
	3P / 1P+1B / 1P+1T	350		500		600		700	
	4P / 2B / 2T / 2P+1B / 2P+1T / 1B+1T	400		500		600		700	
	5P / 1P+2B / 1P+2T / 3P+1B / 3P+1T / 1P+1B+1T	400		500		650		–	
N 1600 N 2000	0	300		450		600		800	
	1P	350		450		600		800	
	2P / 1B / 1T	350		500		600		800	
	3P / 1P+1B / 1P+1T	400		500		650		850	
	4P / 2B / 2T / 2P+1B / 2P+1T / 1B+1T	400		550		650		850	
	5P / 1P+2B / 1P+2T / 3P+1B / 3P+1T / 1P+1B+1T	400		550		700		–	
N 3000	0	350		550		800		1000	
	1P	400		550		800		1000	
	2P / 1B / 1T	400		600		800		1000	
	3P / 1P+1B / 1P+1T	450		600		800		1000	
	4P / 2B / 2T / 2P+1B / 2P+1T / 1B+1T	450		600		–		1000	
	5P / 1P+2B / 1P+2T / 3P+1B / 3P+1T / 1P+1B+1T	450		650		–		1000	

WITH CRUNCH MAGNET

For mechanically latched **TAN** execution (see catalogue B), notice that distance "A" must be that corresponding to contactors with D.C. control plus one aux. contact besides those you need.