

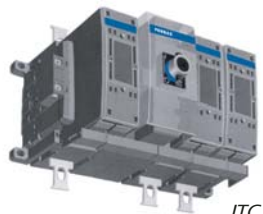


Fused Switches ITC for NH Fuses 63 to 630A

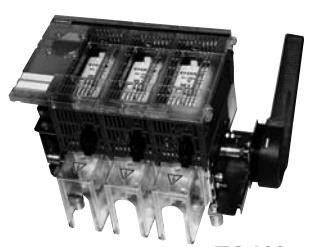
ITC 63



ITC 250



ITC 160



ITC 400

CONTROL: SIDE OR FRONT, PADLOCKABLE IN OFF-POSITION BY 3 PADLOCKS SAFE AND RELIABLE INDICATION OF CONTACT POSITION ON HANDLES

INTERRUPTION: DUAL INTERRUPTION PER PHASE COMPLETE ISOLATION OF FUSE IN OPEN CIRCUIT ON-LOAD

OPENING AND CLOSING: AC 23 AND DC 23

INTERRUPTING POWER: 25 kA A 50 kA.

ISOLATION VOLTAGE: 1000 V.

MECHANISM: SNAP CONTACTS which ensures rapid disconnection regardless of how fast the user turns the operation handle.

FIXING: ON DIN RAIL ON PANEL BOARD

CONSTRUCTION: COMPLYING WITH IEC AND EN 60947-1 AND -3

- PROTECTION INDEX IP 2X
- SUITABLE FOR ALL CLIMATE TYPES
- SILVER-PLATED COPPER CONTACTS
- ISOLATING PARTITIONS IN MATERIAL AS PER UL 94 VO.
- PREISOLATING AND BLOWN-FUSE INDICATION ACCESSORIES.

Main electrical characteristics

			ITC 63A	ITC 160A	ITC 250A	ITC 400A	ITC 630A
Rated operational current at ambient 40°C (I)	lth	63	160	250	400	630	
Rated operational current under cover 40°C	lthe	63	135	230	360	570	
Rated insulation voltage (Ui). Pollution class 3	V	1000	750	1000	1000	1000	
Rated operational voltage AC-20 DC-20	V	1000	750	1000	1000	1000	
Rated impulse withstand voltage	kV	12	12	12	12	12	
Size fuses	DIN	00 / 000	00	Size 1	Size 2	Size 3	
Max. power loss/fuse at lth	W	7,5	12	32/27 lthe	45/37 lthe	60/50 lthe	
RMS prospective short-circuit current with aM or gG class FerrazShawmut Fuses.	kA	50	100	100	100	100	
Fuses Rating Permissible peak let-through current	kA	63	160	250	400	630	
	kA	14	14	35	35	60	
Rated operating current AC-21-A and AC-22-A	≤ 500 V 690 V	A	63	160	250	400	630
			63	135*	250	400	630
Rated operating current AC-23-A	≤ 500 V 690 V	A	63	100	250	400	630
			63*	50*	250	400	630
Rated operating power AC-23 in kW with a 3-phase 1.500 rpm standard asynchronous motor at	400 V 500 V 690 V	kW	30 37 60	55 70 45	132 170 230	210 280 330	315 400 540
AC-23 interrupting rating: Ic A at cos φ = 0.35 under rated operating voltage (Ue)	≤ 500 V 690 V	A	504 504	800 405	2000 2000	3200 3200	5760 5760
DC-23-A rating operating current / poles in series** for	110-220 V 440 V 500-750 V	A	Consult us	160/3 100/4*	250/2 250/2 250/3	400/2 400/2 400/3	630/2 630/2 630/3
RMS permissible short duration (1.5) rated current		kA	2,5	5	8	10	16
Mechanical endurance : operation cycles number (1 cycle = 1 opening + 1 closing of contacts)			10 000	10 000	8 000	8 000	5 000
Electrical endurance : operation cycles number at Ie and cos φ 0.65	≤ 500 V 690 V		.....	1000	.....	.....	.....
			.....	.....	1000	1000	1000
Power loss per pole		W	4	9	11	30	55

(1) For ambient temperature 50°C : x 0.9 - 60°C : x 0.8 ; for horizontal fuse : x 0.9.
* Use in class B ** To be achieved by user *** Test at 100 A



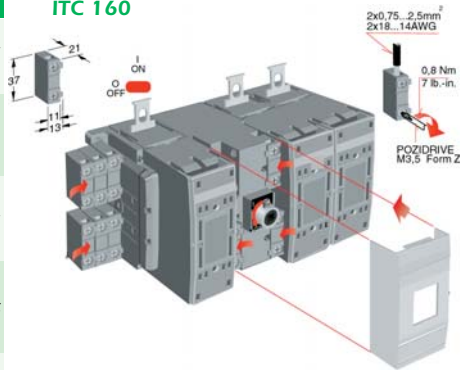
Fused Switches ITC for NH Fuses 63 to 630A

Standard switches - fuses

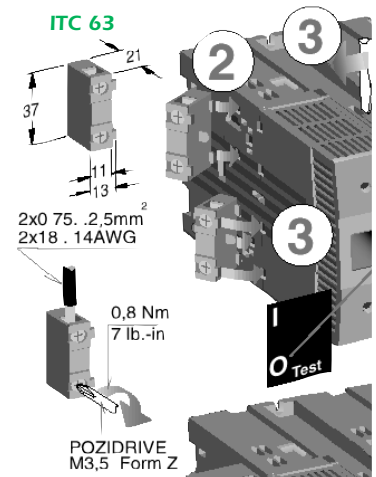
The following items are supplied separately.
For additional adaptations refer to Accessories section
and order selected reference numbers.

	Type	Pole	Designation	Reference Number	Catalog Number
FRONT	00 63 A	3 3+N 4	ITC 63D III 00CDE FRONT ITC 63D III+N 00CDE FRONT ITC 63D IV 00CDE FRONT	A 209898 B 209899 C 209900	ITC63S3CF ITC63S3NCF ITC63S4CF
	00 160 A	3 3+N 4	ITC 160F III 00 CDE Front ITC 160 F iii+NQ0 ITC 160F IV 00 CDE Front	S 210788 T 210789 U 210790	ITC160S3CF ITC160S3NCF ITC160S4CF
	DIN 1 250 A	3 3+N 4	ITC 250D III T1 ITC 250D III+N T1 ITC 250D IV T1	O 207290 R 207291 V 207292	ITC250S3CF ITC250S3NCF ITC250S4CF
	DIN 2 400 A	3 3+N 4	ITC 400D III T2 ITC 400D III+N T2 ITC 400D IV T2	T 207293 V 207294 W 207295	ITC400S3CF ITC400S3NCF ITC400S4CF
	DIN 3 630 A	3 3+N 4	ITC 630D III T3 ITC 630D III+N T3 ITC 630D IV T3	X 207296 Y 207297 Z 207298	ITC630S3CF ITC630S3NCF ITC630S4CF
SIDE	00 63 A	3 3+N 4	ITC 63DM III 00 CDE LAT ITC 63DM III+N 00 CDE LAT ITC 63DM IV 00 CDE LAT	F 209903 G 209904 H 209905	ITC63S3CL ITC63S3NCL ITC63S4CL
	00 160 A	3 3+N 4	ITC 160M III 00 CDE LAT ITC 160M III +N 00CDE LAT ITC 160M IV 00 CDE LAT	W 210791 X210792 Y 210793	ITC160S3CL ITC160S3NCL ITC160S4CL
	DIN 1 250 A	3 3+N 4	ITC 250DM III T1 CDE LAT ITC 250DM III+N T1 CDE LAT ITC 250DM IV T1 CDE LAT	E 208614 F 208615 G 208616	ITC250S3CL ITC250S3NCL ITC250S4CL
	DIN 2 400 A	3 3+N 4	ITC 400DM III T2 CDE LAT ITC 400DM III+N T2 CDE LAT ITC 400DM IV T2 CDE LAT	H 208617 J 208618 K 208619	ITC400S3CL ITC400S3NCL ITC400S4CL

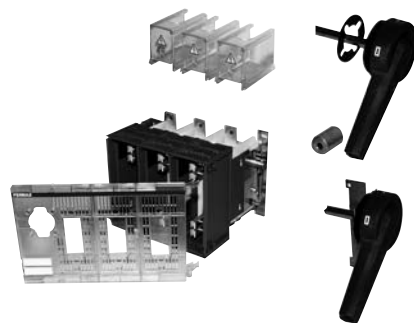
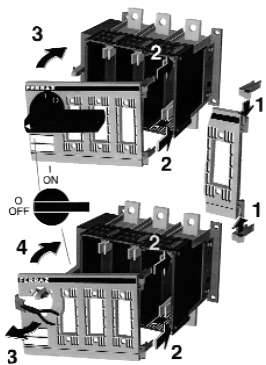
ITC 160



ITC 63

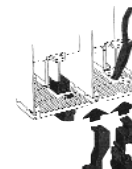


ITC 250D À 630D



BLOWN FUSE M.S.

PRE-ISOLATING M.S.



Microswitches characteristics

Reference Number	Minimum for safe operation	Maximum for operation in AC 12	Applications	
H 209882 L 207493 S 086 588 L 097 300	24 V 25 mA AC / DC	690 V 2 A cos φ = 0,9	Single-standard microswitch Twin-standard microswitch	NC NO NO/NC NO/NC
J 208020	24 V 10 mA AC / DC	690 V 2 A cos φ = 0,9	Single microswitch: aggressive atmosphere or connection with a programmable machine	NO/NC
Blown-fuse indicator microswitches	24 V 25 mA AC / DC	690 V 2 A cos φ = 0,9	Single-standard microswitch	

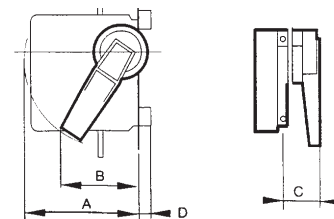


Fused Switches ITC for NH Fuses 63 to 630A

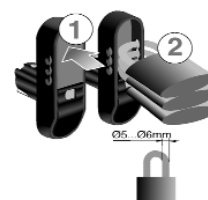
Inside control handle bulk

Insulating padlockable inside side handle

Reference Number	Switch Model	A mm	B mm	C mm	D mm	Weight (kg)	Catalog number
T 090 936	ITC 250 ITC 400	202	170	100	30	1,2	PILRIT500ITC250



Reference Number	Switch Model	A mm	B mm	C mm	D mm	Weight (kg)	Catalog number
E 210109	ITC 63D	50	70	20	XX	0,15	PIITC50/160



Accessories

Reference Number

H A N D L E	Fuse size and Current rating	Pre-isolating microswitch Single microswitch ① One contact(NO/NC) ② Reversing (NO/NC) ③ 2 single micro(NO/NC) Twin microswitch ④ 2 reversing (NO/NC) ⑤ 2x2 single micro(NO/NC) Bas niveau ⑥ 2x2 single micro(NO/NC)	Blown fuse indicator	Finger safe Protection One shroud per terminal	Protection against fuse touching	Inside handle padlockable supplied with shaft. See bulk switches.	Outside handle padlockable supplied with shaft. Distance between switch and handle. See control handle bulk. Black (Red and yellow)	Axle extension The maximum distance between the handle and the machine is - 60 mm compare with the shaft length L
FRONT	00 63A III/III+N/IV	① H209882 (NC)* ① L207493 (NO)*	=====	Built-in	Built-in	E 210109	M 209909 (N 209910)	B 210 106 (L = 290 mm)
	00 160A III/III+N/IV	① H209882 (NC)* ① L207493 (NO)*	=====	N 210807 (1 per terminal)	Built-in		M 209909 (N 209910)	C 210 107 (L = 430 mm)
	DIN1 250A III/III+N/IV		III& III+N/IV A207299 NO L207976 NC B207300 NO N207978 NC	M 096657 (1 per terminal)	G 207305 H 207306 H 207306	Take the outside handle	O 209912 (R 209913)	
	DIN2 400A III/III+N/IV	③ S086588 ⑤ L097300 ⑥ J208020	III& III+N/IV C207301 NO L207976 NC D207302 NO N207978 NC	M 096657 (1 per terminal)	J 207307 K 207308 K 207308	with a protection partition	O 209912 (R 209913)	L 097093 (L = 395 mm)
	DIN3 630A III/III+N/IV		III& III+N/IV E207303 NO L207976 NC F207304 NO N207978 NC	S 095880 (1 per terminal)	L 207309 M 207310 M 207310	against fuses touching	O 209912 (R 209913)	
SIDE	00 63A III/III+N/IV	① H209882 (NC)* ① L207493 (NO)*	=====	Built-in	Built-in	not available take the outside front handle	D 210085 (E 210086)	B 210 106 (L = 290 mm)
	00 160A III/III+N/IV	① H209882 (NC)* ① L207493 (NO)*	=====	N210807	Built-in		D 210085 + E 210454 (E 210086 + E 210454)	C 210 107 (L = 430 mm)
	DIN1 250A III/III+N/IV	③ S086588 ⑤ L097300	III& III+N/IV A 207299 NO L 207976 NC B 207300 NO N 207978 NC	M 096657 (1 per terminal)	G 207305 H 207306 H 207306	T 090936 (red)	Y 090940 (red)	P 092979 (L = 465mm)
	DIN2 400A III/III+N/IV	⑥ J208020	III& III+N/IV C 207301 NO L 207976 NC D 207302 NO N 207978 NC	M 096657 (1 per terminal)	J 207307 K 207308 K 207308	T 090936 (red)	Y 090940 (red)	

* 8 contacts maxi



Fused Switches ITC for NH Fuses 63 to 630A

Catalog Number

HANDLE	Fuse size and Current rating	Pre-isolating microswitch	Blown fuse indicator	Finger safe Protection	Protection against fuse touching	Inside handle padlockable supplied with shaft.	Outside handle padlockable supplied with shaft. Distance between switch and handle. See control handle bulk. Black (Red and yellow)	Axle extension
		Single microswitch ① One contact(NO) ou(NC) ② Reversing (NO/NC) ③ 2 single micro(NO/NC) Twin microswitch ④ 2 reversing (NO/NC) ⑤ 2x2 single micro(NO/NC) Bas niveau ⑥ 2x2 single micro(NO/NC)							One shroud per terminal	See bulk switches.	The maximum distance between the handle and the machine is - 60 mm compare with the shaft length L
FRONT	00 63A III III+N IV	① FOITC32/160NC ① FOIT25/125ETNC	=====	Built-in	Built-in	PIITC50/160	PENITC32/160 PERJIT160	A290ITC50/160 (L = 290 mm)
	00 160A III III+N IV	① FOITC32/160NC ① FOIT25/125ETNC	=====	CBITC125/160 (1 per terminal)	Built-in		PENITC32/160 PERJIT160	A430ITC50/160 (L = 430 mm)
	DIN1 250A III III+N IV		III& III+N IV DITC250NO3/3N DITC250/630NC3 DITC250NO4 DITC250/630NC4	CBITC250/400 (1 per terminal)	CPTITC250/3 CPTITC250/3N/4 CPTITC250/3N/4	Take the outside handle	PERNIT500/1600 PERJIT500/1600	
	DIN2 400A III III+N IV	③ FOIT500NO/NC ⑤ FOIT5002NO/NC ⑥ FOIT5002NONCBN	III& III+N IV DITC400NO3/3N DITC250/630NC3 DITC400NO4 DITC250/630NC4	CBITC250/400 (1 per terminal)	CPTITC400/3 CPTITC400/3N/4 CPTITC400/3N/4	with a protection partition	PERNIT500/1600 PERJIT500/1600	A430ITC50/160 (L = 395 mm)
DIN3 630A III III+N IV		III& III+N IV DITC630NO3/3N DITC250/630NC3 DITC630NO4 DITC250/630NC4	CBIT1000/1600 (1 per terminal)	CPTITC630/3 CPTITC630/3N/4 CPTITC630/3N/4	against fuses touching	PERNIT500/1600 PERJIT500/1600		
SIDE	00 63A III III+N IV	① FOITC32/160NC ① FOIT25/125ETNC	=====	Built-in	Built-in	take the outside front handle	PENITC50/160 PERJIT50/160	A290ITC50/160 (L = 290 mm)
	00 160A III III+N IV	① FOITC32/160NC ① FOIT25/125ETNC	=====	CBITC125/160 (1 per terminal)	Built-in		PENITC50/160 +MANCHONRALAXE6 PERJITC50/160 +MANCHONRALAXE6	A430ITC50/160 (L = 430 mm)
	DIN1 250A III III+N IV	③ FOIT500NO/NC ⑤ FOIT5002NO/NC	III& III+N IV DITC250NO3/3N DITC250/630NC3 DITC250NO4 DITC250/630NC4	CBITC250/400 (1 per terminal)	PTITC250/3 CPTITC250/3N/4 CPTITC250/3N/4	PILRIT500ITC250 (red)	PELRIT500ITC250 (red)	A465IT500ITC250 (L = 465mm)
	DIN2 400A III III+N IV	⑥ FOIT5002NONCBN	III& III+N IV DITC400NO3/3N DITC250/630NC3 DITC400NO4 DITC250/630NC4	CBITC250/400 (1 per terminal)	CPTITC400/3 CPTITC400/3N/4 CPTITC400/3N/4	PILRIT500ITC250 (red)	PELRIT500ITC250 (red)	

* 8 contacts maxi

Outside control handle bulk

Insulating padlockable outside front handle

Reference Number	Switch Model	A mm	B mm	C mm	D mm	L mm	■ mm	Weight (kg)	Figure	Catalog Number
M 209909 N 209910	ITC 63D ITC 160	-	-	45	-	80	6	0,1	1	PENITC32/160 PERJIT160
Q 209912 R 209913	TC 250D ITC 400D ITC 630D	-	-	45	-	145	12	0,2	1	PERNIT500/1600 PERJIT500/1600

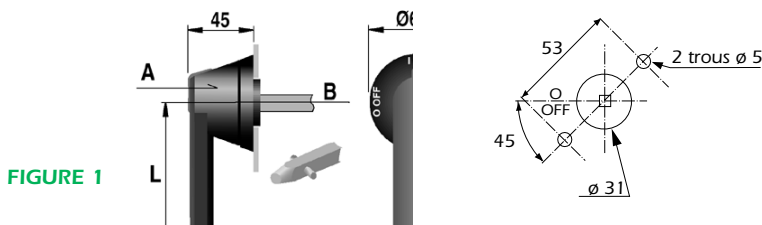


FIGURE 1



Fused Switches ITC for NH Fuses 63 to 630A

Ready to install complete switches

Switch with direct handle + outside handle (1) + Auxiliary preisolating ITCs (2No + 2Nc) + protection against live touching (fuses and terminals)"

Front handle switch

Current rating Ith	Poles	Designation	Reference Number	Catalog Number
63A	3	ITC 63CIII T00 CF/N&R SF	M235347	ITC63C3CFNSF
	3 + N	ITC 63CIII+N T00 CF/N&R SF	N235348	ICT63C3NCFNSF
	4	ITC 63CIV T00 CF/N&R SF	P235349	ITC63C4CFNSF
160A	3	ITC 160CIII T00 CF/N&R SF	T235353	ITC160C3CFNSF
	3 + N	ITC 160CIII+N T00 CF/N&R SF	V235354	ITC160C3NCFNSF
	4	ITC 160IV T00 CF/N&R SF	W235355	ITC160C4CFNSF
250A	3	ITC 250CIII T1 CF/N&R SF	A235359	ITC250C3CFNSF
	3 + N	ITC 250CIII+N T1 CF/N&R SF	B235360	ITC250C3NCFNSF
	4	ITC 250CIV T1 CF/N&R SF	C235361	ITC250C4CFNSF
400A	3	ITC 400CIII T2 CF/N&R SF	N235371	ITC400C3CFNSF
	3 + N	ITC 400CIII+N T2 CF/N&R SF	P235372	ITC400C3NCFNSF
	4	ITC 400CIV T2 CF/N&R SF	Q235373	ITC400C4CFNSF
630A	3	ITC 630CIII T3 CF/N&R SF	B235383	ITC630C3CFNSF
	3 + N	ITC 630CIII+N T3 CF/N&R SF	C235384	ITC630C3NCFNSF
	4	ITC 630CIV T3 CF/N&R SF	D235385	ITC630C4CFNSF

Side handle switch

Current rating Ith	Poles	Designation	Reference Number	Catalog Number
63A	3	ITC 63CIII T00 CL/N&R SF	Q235350	ITC63C3CLNSF
	3 + N	ITC 63CIII+N T00 CL/N&R SF	R235351	ICT63C3NCLNSF
	4	ITC 63CIV T00 CL/N&R SF	S235352	ITC63C4CLNSF
160A	3	ITC 160CIII T00 CL/N&R SF	X235356	ITC160C3CLNSF
	3 + N	ITC 160CIII+N T00 CL/N&R SF	Y235357	ITC160C3NCLNSF
	4	ITC 160IV T00 CL/N&R SF	Z235358	ITC160C4CLNSF
250A	3	ITC 250CIII T1 CL/N&R SF	G235365	ITC250C3CLNSF
	3 + N	ITC 250CIII+N T1 CL/N&R SF	H235366	ITC250C3NCLNSF
	4	ITC 250CIV T1 CL/N&R SF	J235367	ITC250C4CLNSF
400A	3	ITC 400CIII T2 CL/N&R SF	V235377	ITC400C3CLNSF
	3 + N	ITC 400CIII+N T2 CL/N&R SF	W235378	ITC400C3NCLNSF
	4	ITC 400CIV T2 CL/N&R SF	X235379	ITC400C4CLNSF

(1) length of shaft outside handle: 63A = 430 mm, 160A = 430 mm, 250A = 395 mm, 400A = 395 mm, 630A = 395 mm

Outside control handles dimensions

Insulating padlockable outside side handle

Reference Number	Switch Model	A mm	B mm	C mm	D mm	L mm	mm	Weight (kg)	Figure
D 210085	ITC 63DS			45		80	6	0,1	2
E 210096	ITC 160M			45		80	6	0,1	2
Y 090940	ITC 250DM ITC 400DM	202	170	55	30	145	12	0,75	3

FIGURE 2

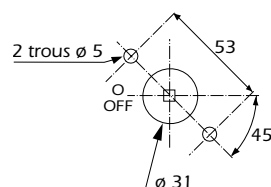
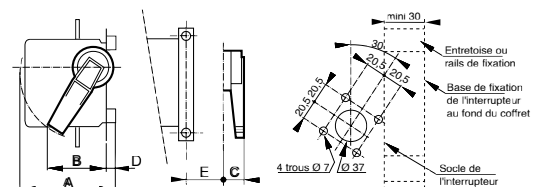


FIGURE 3





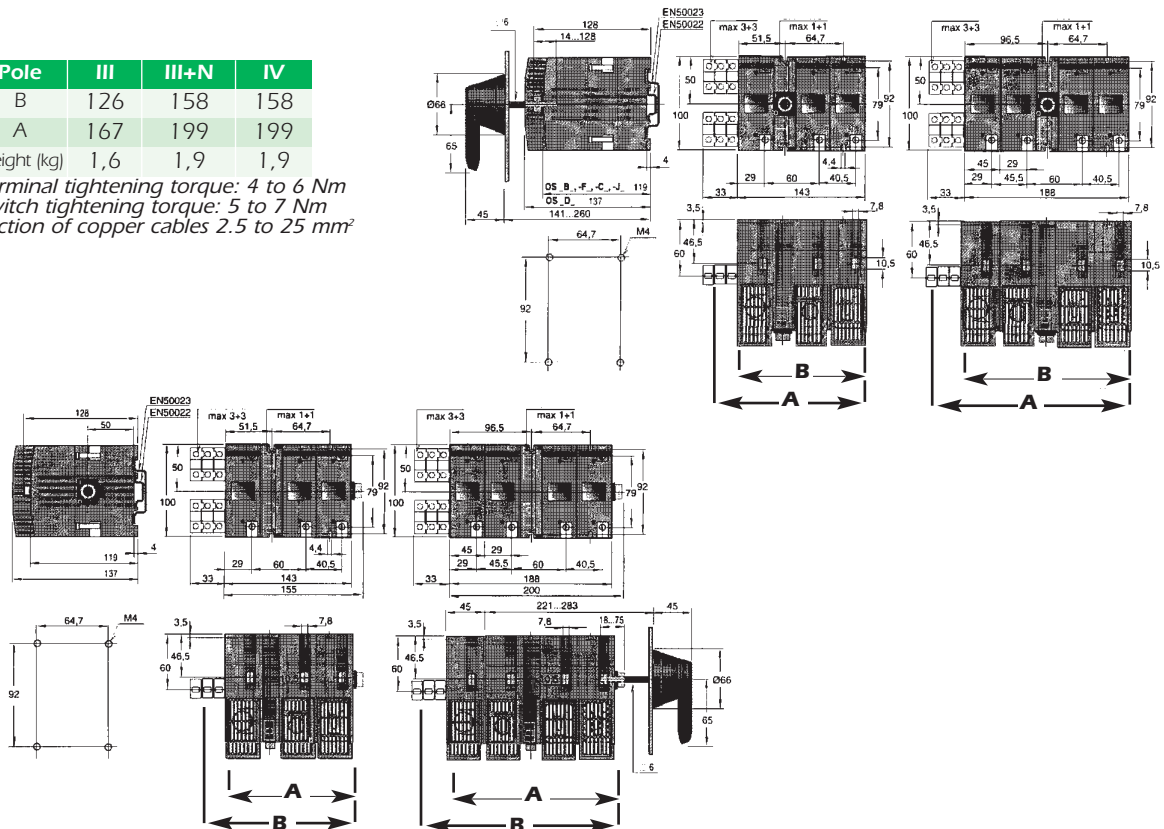


Fused Switches ITC for NH Fuses 63 to 630A

ITC 63

Pole	III	III+N	IV
B	126	158	158
A	167	199	199
Weight (kg)	1,6	1,9	1,9

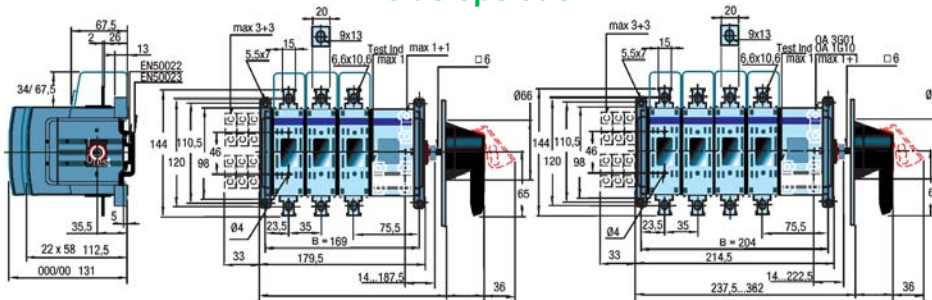
Terminal tightening torque: 4 to 6 Nm
Switch tightening torque: 5 to 7 Nm
Section of copper cables 2.5 to 25 mm²



Dimensions and weight ITC 160

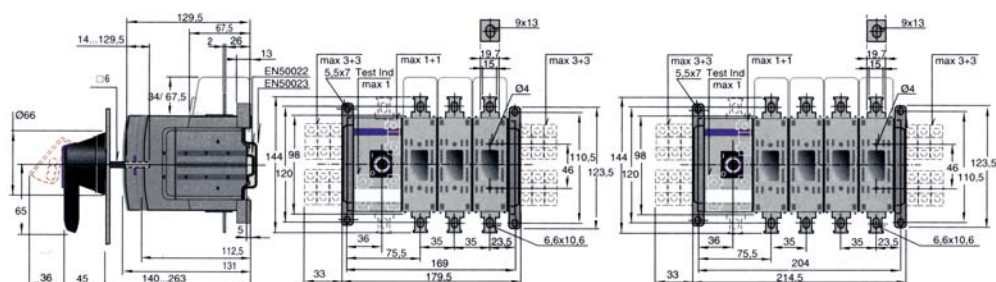
Side operation

Pole	III	III+N	IV
B	169	204	204
A	156	214	214
Weight (kg)	1.9	2.4	2.4



Terminal tightening torque: 15 to 22 Nm
Connection: torque 20 mm with M8 bolt
Switch tightening torque: 3 to 4 Nm

Front operation



NOTE: Weights given without accessories; tightening torques of switches depend on quality of bolts.

