



INFORMATION ON BUSHINGS EN 50180 12-24-36/630-1250-2000-3150 **FROM PAGE 3.1EN TO 3.5EN**

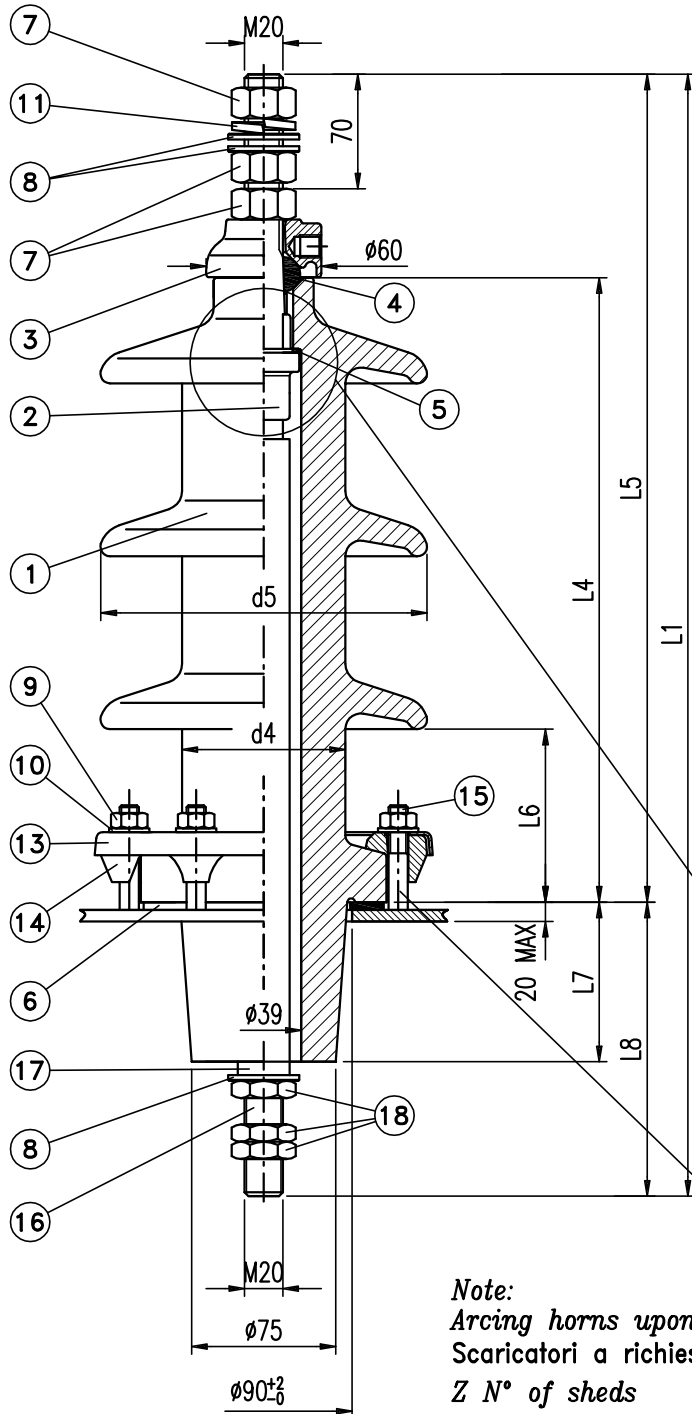
All bushings shown are according to the last European specifications.
They are normally supplied without a/horns, complete with fixing kit, which for 1000 and 2000-3150 can be typical DIN 42538 size or new EN size (bolt circle 5 mm bigger); please state on order the fixation required.

COMPONENT LIST PAGE 3.1EN

Pos. 1	Porcelain
Pos. 2	Brass bolt "D" (usually DIN execution)
Pos. 3	Cap "E"
Pos. 4	Ring gasket "J"
Pos. 5	Fiber spacer "O" Ring gasket "J"
Pos. 6	Flange gasket "N"
Pos. 7	Brass nut M20 DIN 934
Pos. 8	Brass washer dia. 21 DIN 125
Pos. 9	Mild steel zinkplated nut M10
Pos. 10	Mild steel zinkplated washer dia. 10,5 mm
Pos. 11	Spring washer dia. 21 DIN 127
Pos. 13	Fixing ring "B" DIN 42531 (in mild steel zinkplated or, upon request, in aluminium)
Pos. 14	Aluminium clamping piece "E" DIN 42538
Pos. 15	Welding stud M10x55 (not supplied)
Pos. 16	Rigid copper rod
Pos. 17	Insulating tube C.B.
Pos. 18	Brass locknut M20 DIN 936

COMPONENT LIST PAGE 3.3EN – 3.4EN – 3.5EN

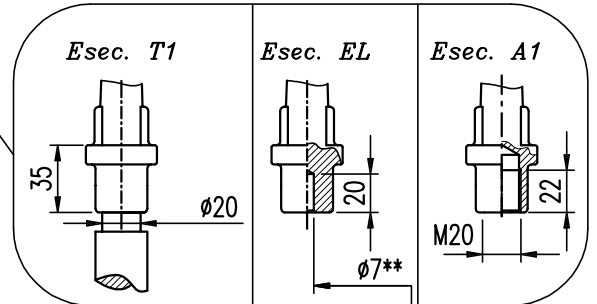
Pos. 1	Porcelain
Pos. 2	Copper rod
Pos. 3	Brass nut DIN 934
Pos. 4	Brass top washer "F"
Pos. 5	NBR ring gasket "J"
Pos. 6	Brass cap "E"
Pos. 7	Fiber gasket
Pos. 8	Vent/screw "R"
Pos. 9	NBR gasket "M"
Pos. 10	Fiber spacer "O"
Pos. 11	Brass ring "P"
Pos. 12	Locking screw
Pos. 13	Copper ring "S"
Pos. 14	Mild steel zinkplated chromium passivated M12 DIN 934
Pos. 15	Mild steel washer dia. 13 mm
Pos. 16	Fixing ring "C-D" DIN 42538 or EN 1000 / EN 3150
Pos. 17	Aluminium clamping piece "F" DIN 42538
Pos. 18	NBR flange gasket "N"
Pos. 19	Centering ring
Pos. 20	Fixing stud M12x70 (not supplied)
Pos. 21	Bronze contact ring "U"
Pos. 51D	Flag EP / FP DIN 43675
Pos. 51U	Flag UNEL size
Pos. 52	Brass nut DIN 934
Pos. 53	Brass locknut DIN 936
Pos. 54D-U	Internal connecting flag



Posizione	Descrizione / Description
1	PORCELLANA PORCELAIN
2	PERNO DI CHIUSURA "D" BRASS BOLT "D"
3	CAPPA "E" BRASS CAP "E"
4	GUARNIZIONE TOROIDALE "J" SEALING RING GASKET "J"
5	GUARNIZIONE SAGOMATA INTERNAL GASKET
6	GUARNIZIONE FLANGIA FLANGE GASKET
7	DADO M20 OT. UNI 5588 BRASS NUTS M20 DIN 934
8	RONDELLA OTTONE #21 BRASS WASHER #21
9	DADO M10 Fe UNI 5588 STEEL NUTS M10 DIN 934
10	RONDELLA Fe #10.5 STEEL WASHER #10.5
11	RONDELLA GROWER UNI 1751 SPRING WASHER #21
13	ANELLO DI FISSAGGIO FIXING RING "A"
14	BLOCCHETTO ALLUMINIO ALU-CLAMPING PCE
15	PRIGIONIERO (NON FORNITO) WELDING STUD (NOT SUPPLIED)
* 16	TIRANTE INTERNO IN RAME COPPER INNER ROD
* 17	TUBO ISOLANTE INSULATING TUBE
* 18	DADO M20 OT. UNI 5589 BRASS NUTS M20 DIN 936

* supplied only for Esec. T1 (on request)

* Fornito solo per esec. T1



** Other sizes on demand
** Altre misure a richiesta

n° 6 prigionieri di fissaggio M10x55
in acciaio su phi 140 mm (non forniti)
n° 6 fixing studs made in steel
M10x55 Bolt circle 140 mm
(not supplied with the kit)

Note:
Arcing horns upon request
Scaricatori a richiesta
Z N° of sheds
Z N° alette

LA FIGURA MOSTRA ISOLATORE 24/630 P2 IN SCALA 1:4

THE FIGURE SHOWS THE BUSHING 24/630 P2 (1:4 SCALE)

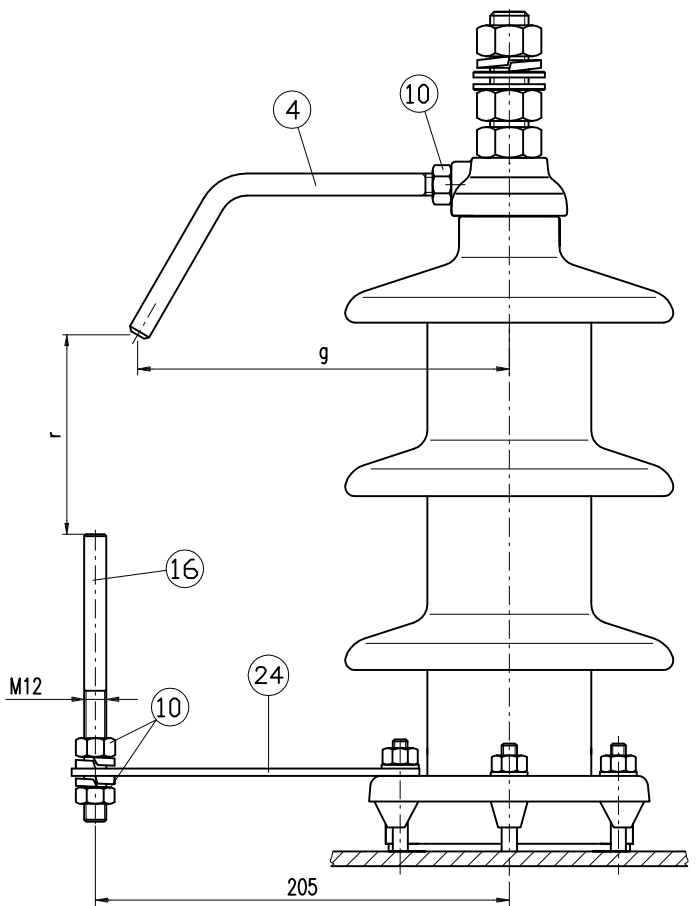
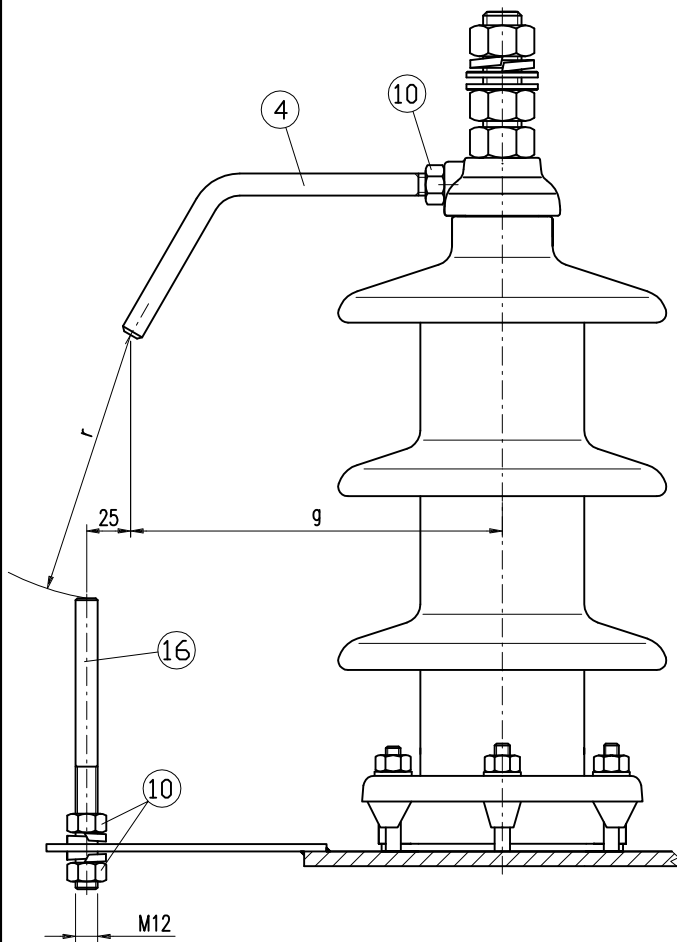
Isolatore Bushing	Tensione Voltage KV	Corrente Current A	Livello inquinazione e linea di fuga min. Pollution level and min. creep. distance				Porcellana / Porcelain			L4 max mm	L5 max mm	L6 min mm	d4 max mm	d5 max mm	L1 max mm	L7 max mm	L8 max mm	Massa Kg	Z
			I	II	III	IV	Tipo Type	Linea fuga Creepage distance mm	Distanza d'arco Arcing distance mm										
12-630/P3	12	630	192	240	300		6	315	190	235	350	90	80	155	503	83	153		2
12-630/P4	12	630				372													
24-630/P2	24	630	384	480			7	490	285	325	440	90	85	170	593	83	153		3
24-630/P4	24	630			600	744													
36-630/P2	36	630	576	720			8	760	375	423	540	100	85	180	693	83	153		5
36-630/P4	36	630			900	1116	9	1155	475	515	630	100	85	210	850	150	220		7

CEDASPE

ISOLATORI PASSANTI PER TRASFORMATORI EN 50180
TENSIONE NOMINALE 12-24-36kV CORRENTE NOMINALE 630A
Outdoor transformer bushing EN 50180
rated voltage 12-24-36kV rated current 630A

Fig. A

Fig. B



- A= Senza supporto.
Without bracket.
- B= Con supporto.
With bracket.

Esecuzione standard: materiale Fe zincotropicalizzato.
Standard execution: steel zinc plated yellow passivated.

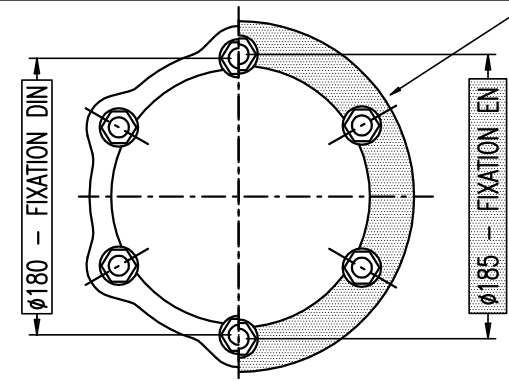
Pos.	Q.ty	Descrizione / Description
4	1	Scaricatore superiore Top arcing horn
16	1	Scaricatore inferiore Bottom arcing horn
10	3	Dado M12 Fe UNI 5588 Steel nut M12 DIN 934
24	1	Supporto Bracket

Tipo di / Type of isolat. / bushing	Type of porc.	g	r	Fig. A Cod.	Fig. B Cod.
12/630 P3	6	180	85	AH20F0630D	AH10F063A1
12/630 P4	7	180	85	AH10F0P4ED	AH10F0P4EU
24/630 P2		180	155	AH20F0630D	AH20F063A1
24/630 P4	8	200	155	AH40F0630D	AH40F063A1
36/630 P2		200	220	AH30F0630D	AH30F063A1
36/630 P4		200	220	AH30F0P4ED	AH40F063A1

SCHEMA MONTAGGIO SPINTEROMETRI PER ISOLATORI
ARCING HORNS ASSEMBLY FOR BUSHINGS
12-24-36 / 630 EN50180

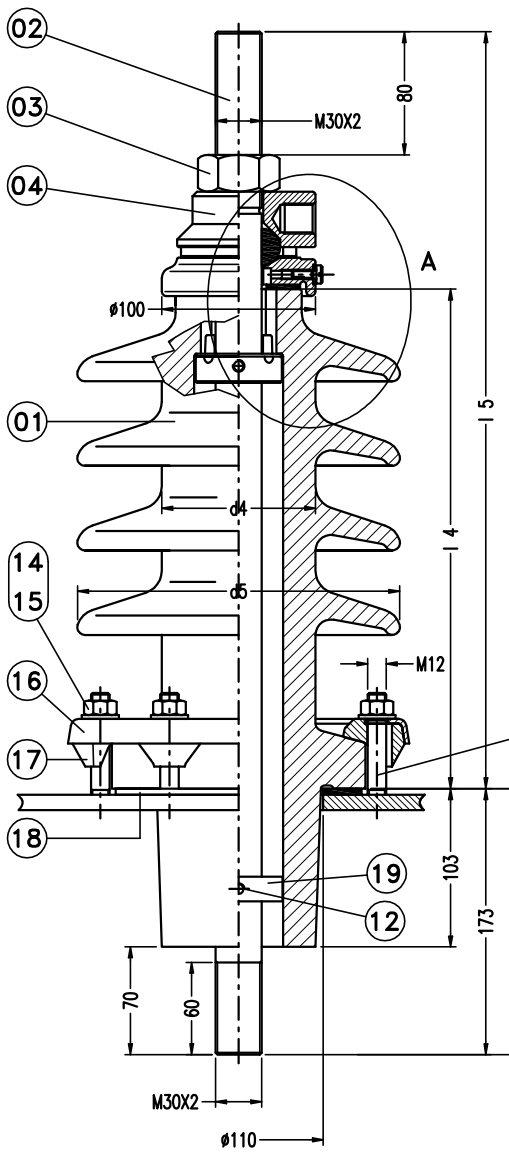
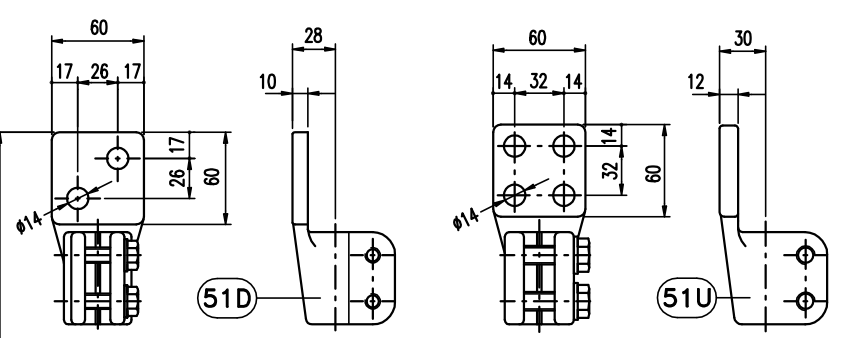
"B" = Dettaglio fissaggio
 "B" = Fixation detail

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 REV. 07 DTD 07/10/09
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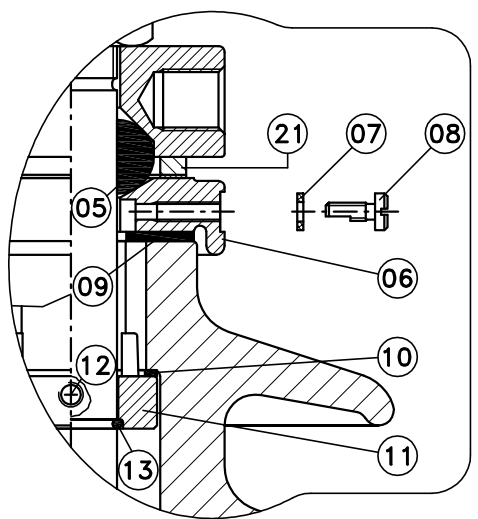


Esec. DIN

Esec. UNEL



n° 6 prigionieri di fissaggio M12x70 in acciaio su Ø180/185 mm (non forniti)
 Vedere dettaglio "B"
 n° 6 fixing studs made in steel M12x70 Bolt circle 180/185 mm (not supplied with the kit)
 See detail "B"



VISTA "A"
 VIEW "A"

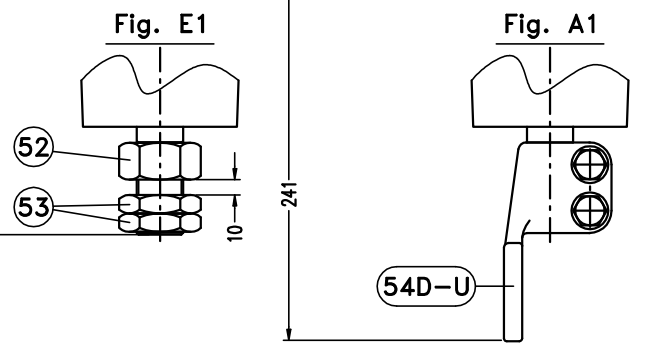


Fig. C1

LA FIGURA MOSTRA ISOLATORE 24/1250 P3 IN SCALA 1:5

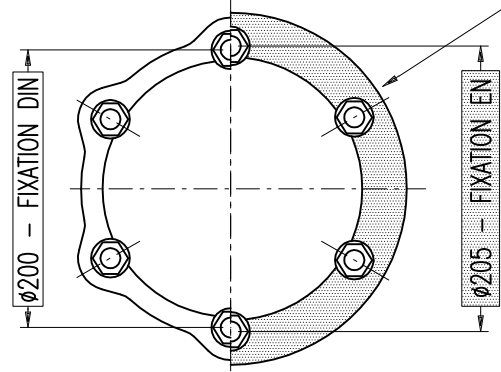
THE FIGURE SHOWS THE BUSHING 24/1250 P3 (1:5 SCALE)

Isolatore Bushings	Tensione Voltage KV	Corrente Current A	Livello polluzione e linea di fuga min. Pollution level and min.creep.distance				Porcellana / Porcelain (mm)			l4 max	l5 max	d4 max	d5 max	a max	L1 max	N° Alette N° of Sheds	Massa Kg
			I	II	III	IV	Tipo Type	Linea di fuga Creepage distance	Distanza d'arco Arcing distance								
12-1250/P4	12	1250	192	240	300	372	21	385	215	260	415	100	210	480	653	2	
24-1250/P3	24	1250	384	480	600		22	620	280	325	480	100	210	545	718	4	
24-1250/P4	24	1250	576	720	900	744	23	930	385	420	575	100	240	640	813	5	
36-1250/P3	36																
36-1250/P4	36	1250				1116	24	1145	500	535	690	100	240	755	928	6	

ISOLATORI PASSANTI PER TRASFORMATORI EN 50180
 CORRENTE NOMINALE 1250A
 OUTDOOR TRANSFORMER BUSHING EN 50180
 RATED CURRENT 1250A



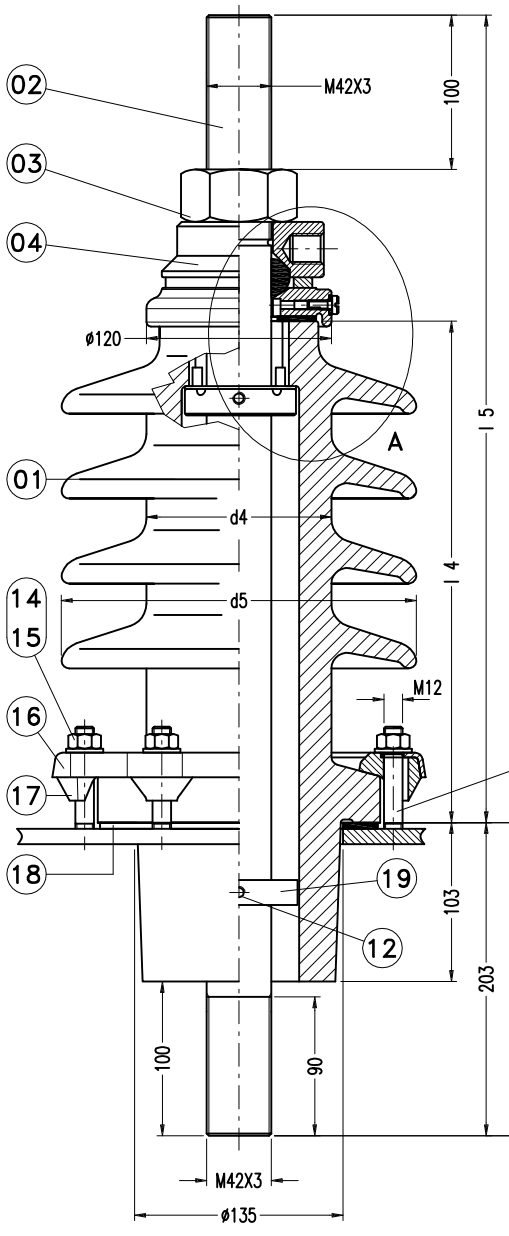
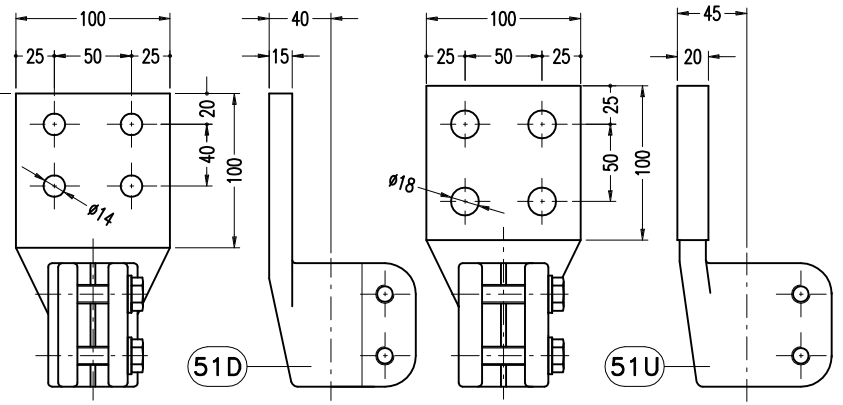
LMT [(0.0) (196,286)] A4 (210x297) FILE = PAG3-4EN.DWG REV. 06 DTD 12/03/07 La CEDASPE S.p.A. si riserva a termini di legge la proprietà del presente disegno con divieto di riproduzione o comunicarlo a terzi senza sua autorizzazione.



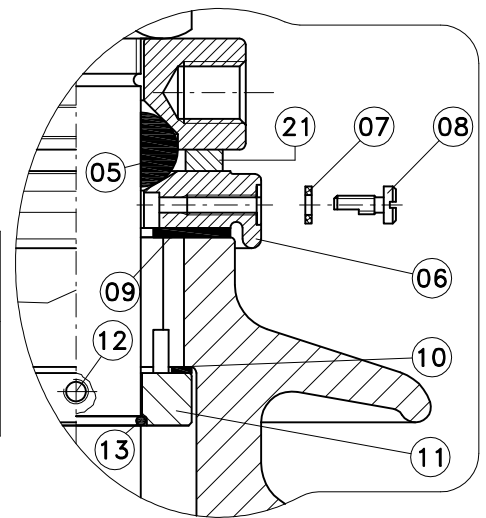
"B" = Dettaglio fissaggio
 "B" = Fixation detail

Esec. DIN

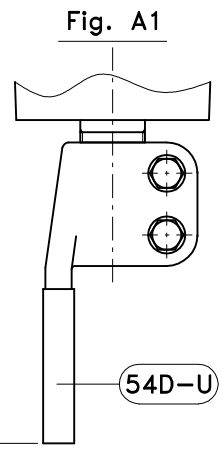
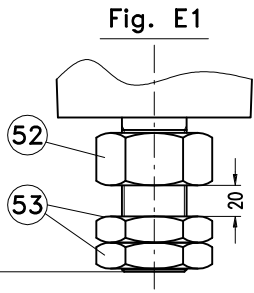
Esec. UNEL



n° 6 prigionieri di fissaggio M12x70 in acciaio su 200/205 mm (non forniti)
 Vedere dettaglio "B"
 n° 6 fixing studs made in steel M12x70 Bolt circle 200/205 mm (not supplied with the kit)
 See detail "B"



VISTA "A"
 View "A"



LA FIGURA MOSTRA ISOLATORE 24/2000 P3 IN SCALA 1:5

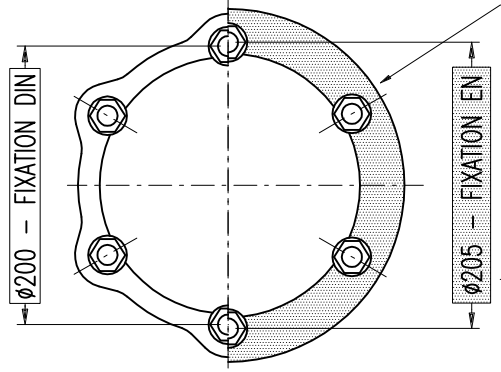
THE FIGURE SHOWS THE BUSHING 24/2000 P3 (1:5 SCALE)

Isolatore Bushing	Tensione Voltage KV	Corrente Current A	Livello polluzione e linea di fuga min. Pollution level and min.creep.distance				Porcellana / Porcelain (mm)			l4 max	l5 max	d4 max	d5 max	a max	L1 max	N° Alette N° of Sheds	Massa Kg
			I	II	III	IV	Tipo Type	Linea di fuga Creepage distance	Distanza d'arco Arcing distance								
12-2000/P4	12	2000	192	240	300	372	25	385	210	260	450	120	230	563	766	2	
24-2000/P3	24	2000	384	480	600		26	620	275	325	515	120	230	628	831	4	
24-2000/P4	24	2000	576	720	900	744	27	920	385	420	610	125	260	723	926	5	
36-2000/P3	36																
36-2000/P4	36	2000				1116	28	1135	495	535	725	125	260	838	1041	6	



ISOLATORI PASSANTI PER TRASFORMATORI EN 50180
 CORRENTE NOMINALE 2000A
 OUTDOOR TRANSFORMER BUSHING EN 50180
 RATED CURRENT 2000A

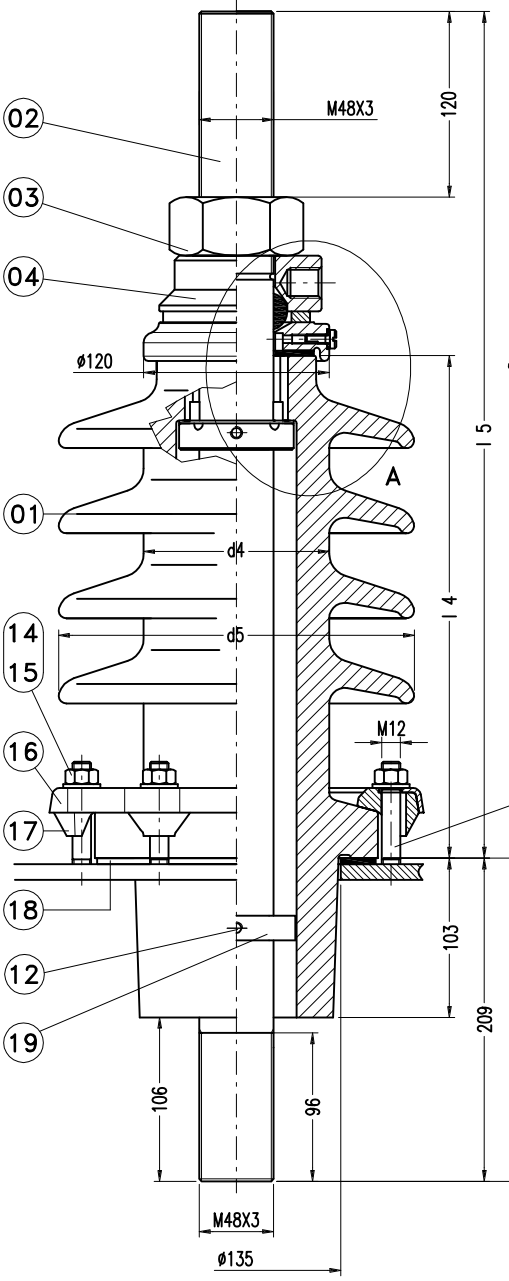
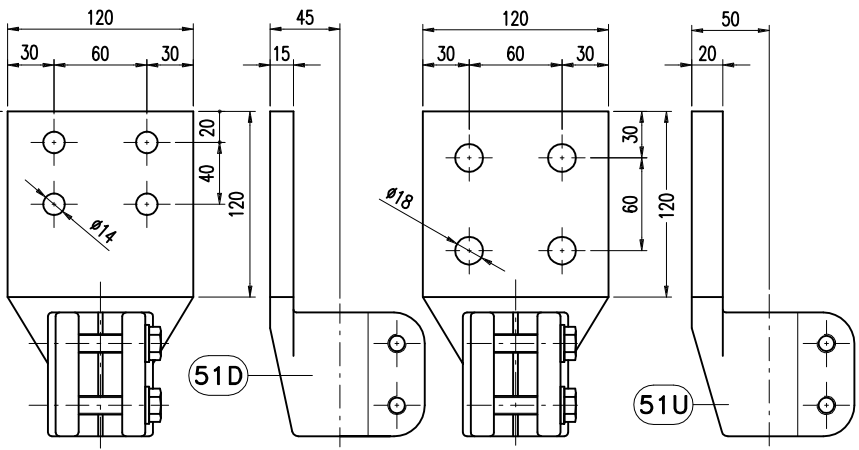
LMT [(0.0) (196,286)] A4 (210x297) FILE = PAC3-SEN.DWG REV. 06 DTD 20/03/07 La CEDASPE S.p.A. si riserva o termini di legge la proprietà del presente disegno con divieto di riprodurlo o comunicarlo a terzi senza sua autorizzazione.



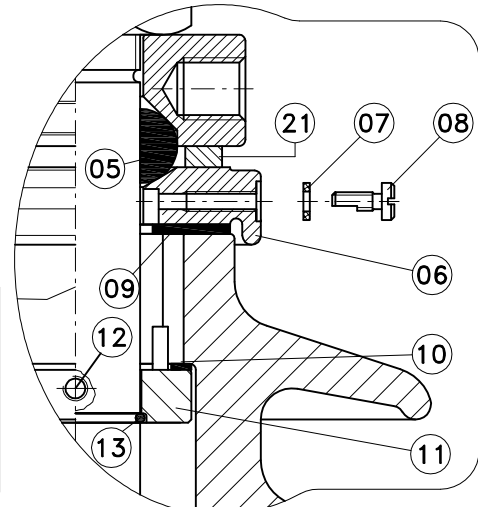
"B" = Dettaglio fissaggio
 "B" = Fixation detail

Esec. DIN

Esec. UNEL



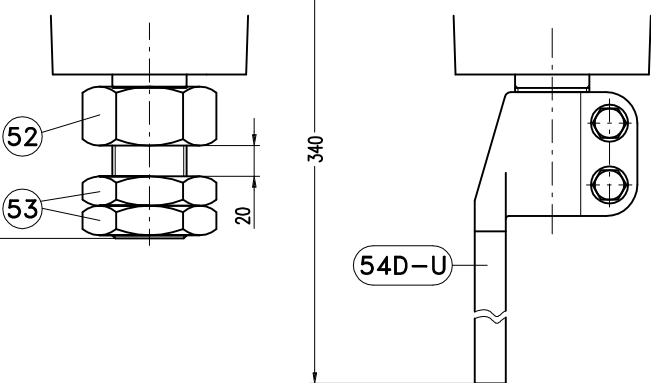
n° 6 prigionieri di fissaggio M12x70 in acciaio su 200/205 mm (non forniti)
 Vedere dettaglio "B"
 n° 6 fixing studs made in steel M12x70 Bolt circle 200/205 mm (not supplied with the kit)
 See detail "B"



VISTA "A"
 View "A"

Fig. E1

Fig. A1



LA FIGURA MOSTRA ISOLATORE 24/3150 P3 IN SCALA 1:5

THE FIGURE SHOWS THE BUSHING 24/3150 P3 (1:5 SCALE)

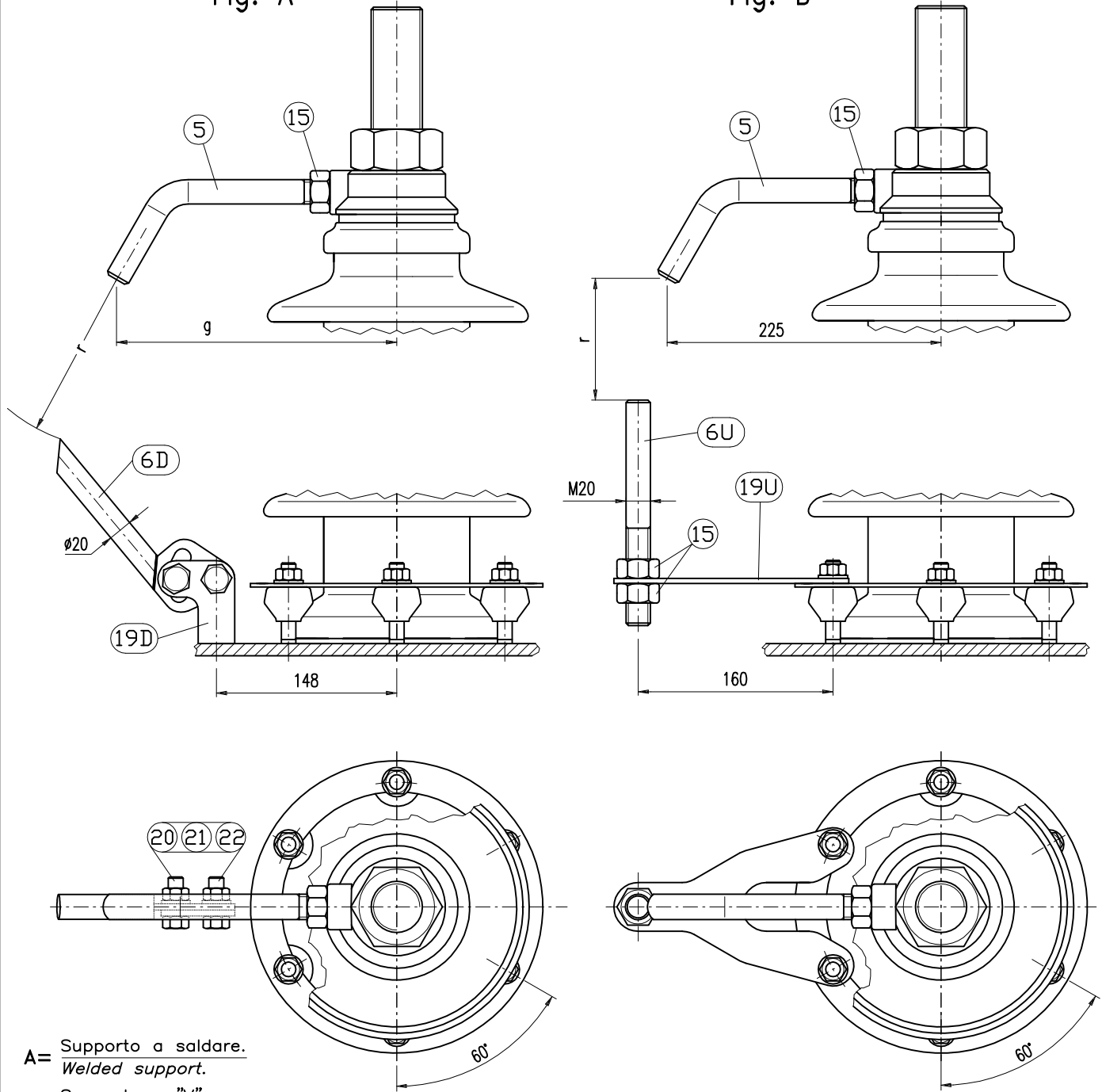
Isolatore Bushings	Tensione Voltage KV	Corrente Current A	Livello polluzione e linea di fuga min. Pollution level and min.creep.distance				Porcellana / Porcelain (mm)		l4 max	l5 max	d4 max	d5 max	a max	L1 max	N° Alette N° of Sheds	Masso Kg	
			I	II	III	IV	Linea di fuga Creepage distance	Distanza d'arco Arcing distance									
12-3150/P4	12	3150	192	240	300	372	25	385	210	260	474	120	230	607	816	2	
24-3150/P3	24	3150	384	480	600		26	620	275	325	539	120	230	672	881	4	
24-3150/P4	24	3150	576	720	900	744	27	920	385	420	634	125	260	767	976	5	
36-3150/P3	36																
36-3150/P4	36	3150				1116	28	1135	495	535	749	125	260	882	1091	6	



ISOLATORI PASSANTI PER TRASFORMATORI EN 50180
 CORRENTE NOMINALE 3150A
 OUTDOOR TRANSFORMER BUSHING EN 50180
 RATED CURRENT 3150A

Fig. A

Fig. B



A= Supporto a saldare.
Welded support.

B= Supporto a "V".
"V" bracket.

Pos.	Q.ty	Descrizione / Description
5	1	Scaricatore superiore Top arcing horn
6D/U	1	Scaricatore inferiore Bottom arcing horn
15	1/3	Dado M20 Fe UNI 5588 Steel nut M20 DIN 934
19D/U	1	Supporto Bracket
20	2	Vite Fe M12 Steel screw M12
21	2	Rondella Fe ø13 Steel washer ø13
22	2	Dado M12 Fe UNI 5588 Steel nut M12 DIN 934

Esecuzione standard: materiale Fe zincotropicalizzato.
Standard execution: steel zinc plated yellow passivated.

Tipo di / Type of isolat. / bushing	porc.	Fig. A		Fig. B	
		g	r	r	Cod.
12/1250-3150 P4	21/25	85	225	70	AH20F1000D
24/1250-3150 P3	22/26	155	225	100	AH20F1000D
24/1250-3150 P4	23/27	155	225	100	AH20F1P4EU
36/1250-3150 P3				200	AH20F1P3EU
36/1250-3150 P4	24/28	220	290	200	AH30F1000D
				200	AH30F1P4EU

SCHEMA MONTAGGIO SPINTEROMETRI PER ISOLATORI
ARCING HORNS ASSEMBLY FOR BUSHINGS
12-24-36 / 1250÷3150 EN50180