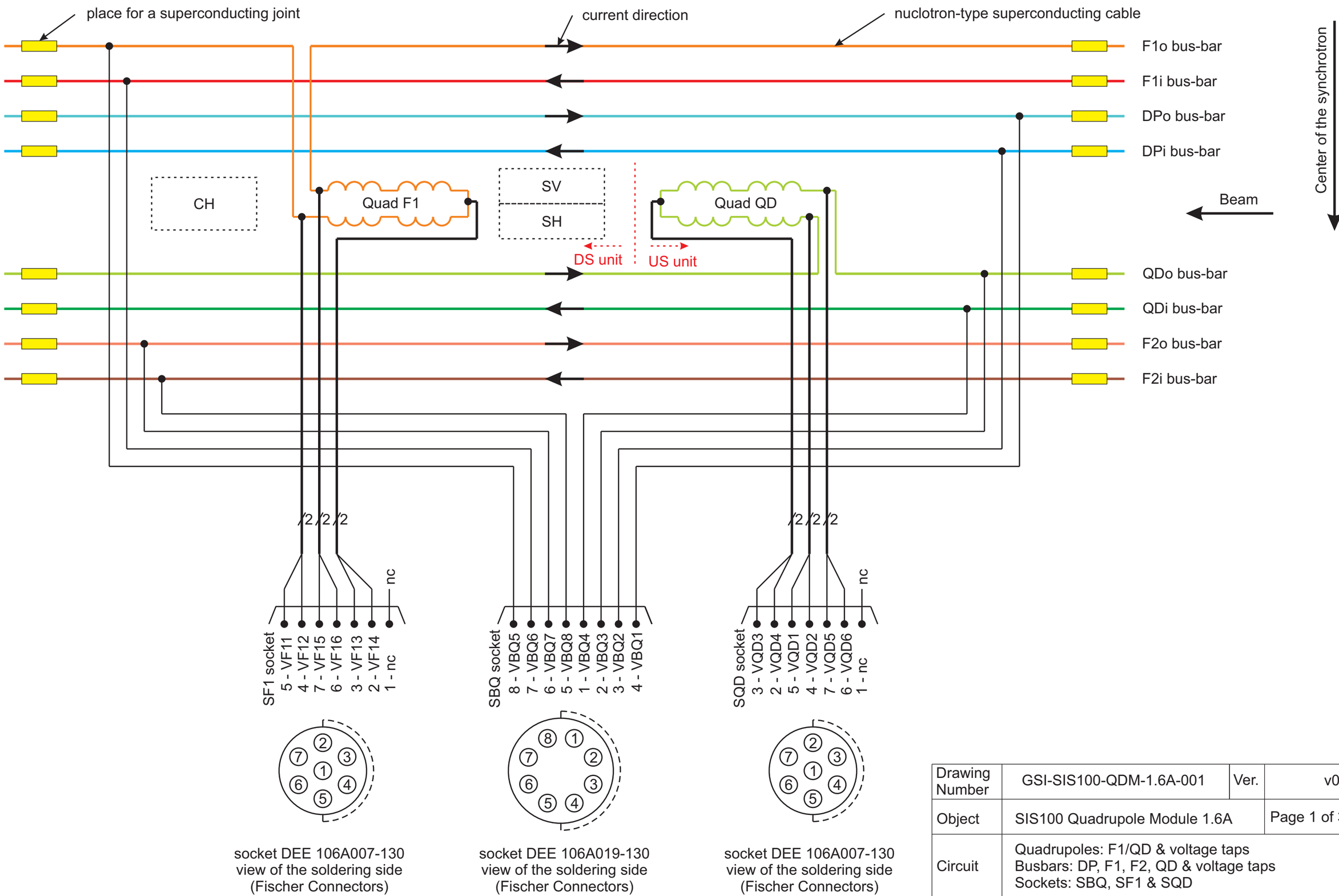
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sis100_qdm_1_6A__03Nov2014.pdf modified 2014-12-02 15:43



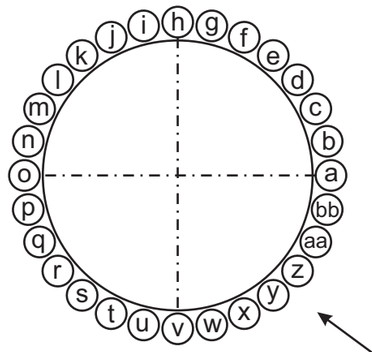
socket DEE 106A007-130
view of the soldering side
(Fischer Connectors)

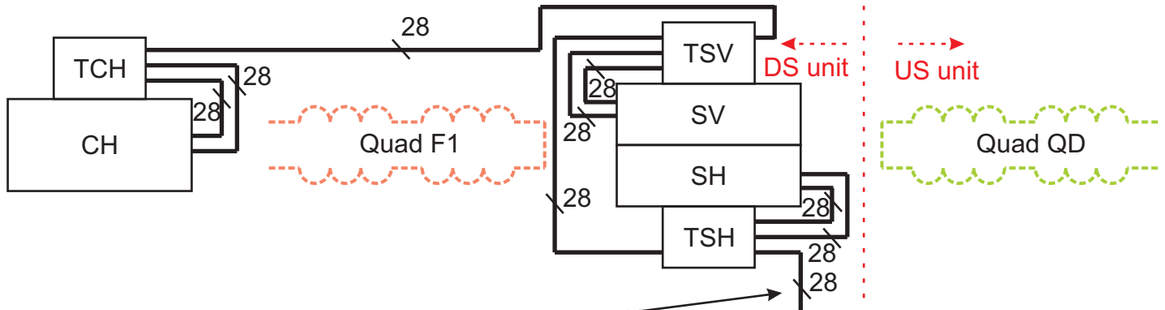
socket DEE 106A019-130
view of the soldering side
(Fischer Connectors)

socket DEE 106A007-130
view of the soldering side
(Fischer Connectors)

Drawing Number	GSI-SIS100-QDM-1.6A-001	Ver.	v02
Object	SIS100 Quadrupole Module 1.6A		Page 1 of 3
Circuit	Quadrupoles: F1/QD & voltage taps Busbars: DP, F1, F2, QD & voltage taps Sockets: SBQ, SF1 & SQD		
Author	P. Szwangruber (PBMT)	Date	2014-Nov-03
Revised	W. Freisleben (PBMT)	Date	2014-Nov-03

Comments:
CH: chromaticity sextupole (horizontal); (SV+SH) - steering magnet;
voltage tap wire: HH-2619-LH (Axon GmbH); each socket shall receive its own voltage tap bundle; each socket pin (soldering side) shall be covered by 30 mm of shrinking tube (type ATUM-3/1-0); for twisting of voltage tap wires see instrumentation list;
nc - not connected; DS/US - beam down stream/up stream direction;

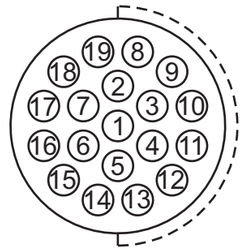




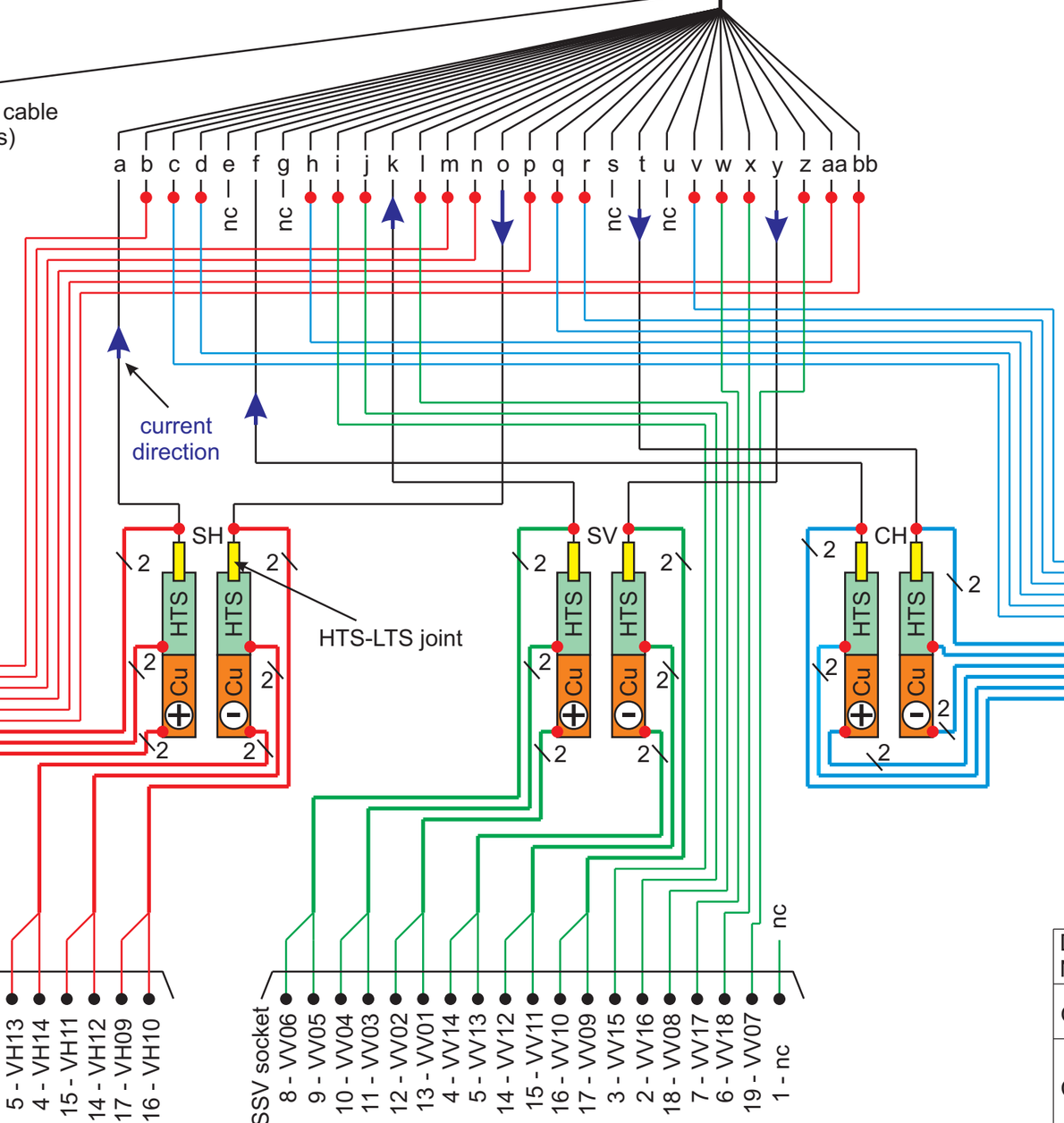
Beam

Center of the synchrotron

superconducting corrector cable
(LTS, insulated strands)



socket DEE 107A015-130
view of the soldering side
(Fischer Connectors)



Drawing Number	GSI-SIS100-QDM-1.6A-002	Ver.	v02
Object	SIS100 Quadrupole Module 1.6A		Page 2 of 3
Circuit	Corrector magnets & bus-bars & voltage taps Local current leads & voltage taps Sockets: SSH,SSV & SCS		
Author	P. Szwangruber (PBMT)	Date	2014-Nov-03
Revised	W. Freisleben (PBMT)	Date	2014-Nov-03

Comments:

CH: chromaticity sextupole (horizontal); (SV+SH) - steering magnet: SV - vertical coil, SH - horizontal coil; (Cu+HTS) - local current lead; TSV - terminal box for steerer vertical coil, TSH - terminal box for steerer horizontal coil, TCH - terminal box for chromaticity sextupole; nc - not connected; each socket shall receive its own voltage tap bundle; each socket pin (soldering side) shall be covered by 30 mm of shrinking tube (type ATUM-3/1-0); for twisting of voltage tap wires see instrumentation list; voltage tap wire: HH-2619-LH (Axon GmbH);

TSH

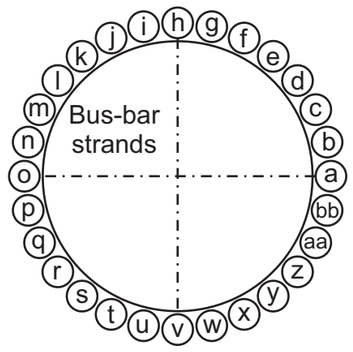
Solder number	Bus-bar strand	Coil strand* (current input)	Coil strand (current output)	Comments
1	a	a	-	current "+"
2	-	b	bb	
3	-	c	aa	
4	-	d	z	
5	-	e	y	
6	-	f	x	
7	-	g	w	
8	b	h	v	"middle" Vtap
9	-	i	u	
10	-	j	t	
11	-	k	s	
12	-	l	r	
13	-	m	q	
14	-	n	p	
15	aa-bb	-	o	MID "+" (x2)
16	m-n	o	-	MID "-" (x2)
17	o	-	n	current "-"
18	-	p	m	
19	-	q	l	
20	-	r	k	
21	-	s	j	
22	-	t	i	
23	-	u	h	
24	p	v	g	"middle" Vtap
25	-	w	f	
26	-	x	e	
27	-	y	d	
28	-	z	c	
29	-	aa	b	
30	-	bb	a	

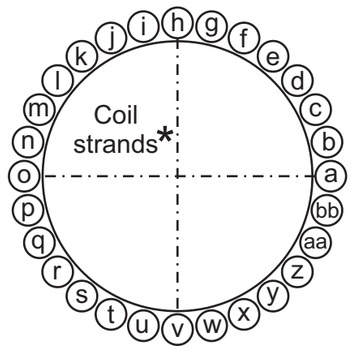
TSV

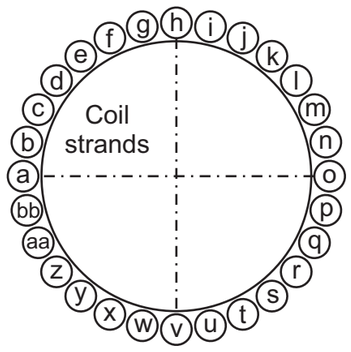
Solder number	Bus-bar strand	Coil strand* (current input)	Coil strand (current output)	Comments
1	k	a	-	current "+"
2	-	b	bb	
3	-	c	aa	
4	-	d	z	
5	-	e	y	
6	-	f	x	
7	-	g	w	
8	l	h	v	"middle" Vtap
9	-	i	u	
10	-	j	t	
11	-	k	s	
12	-	l	r	
13	-	m	q	
14	-	n	p	
15	i-j	-	o	MID "+" (x2)
16	w-x	o	-	MID "-" (x2)
17	y	-	n	current "-"
18	-	p	m	
19	-	q	l	
20	-	r	k	
21	-	s	j	
22	-	t	i	
23	-	u	h	
24	z	v	g	"middle" Vtap
25	-	w	f	
26	-	x	e	
27	-	y	d	
28	-	z	c	
29	-	aa	b	
30	-	bb	a	

TCH

Solder number	Bus-bar strand	Coil strand* (current input)	Coil strand (current output)	Comments
1	f	a	-	current "+"
2	-	b	bb	
3	-	c	aa	
4	-	d	z	
5	-	e	y	
6	-	f	x	
7	-	g	w	
8	h	h	v	"middle" Vtap
9	-	i	u	
10	-	j	t	
11	-	k	s	
12	-	l	r	
13	-	m	q	
14	-	n	p	
15	c-d	-	o	MID "+" (x2)
16	q-r	o	-	MID "-" (x2)
17	t	-	n	current "-"
18	-	p	m	
19	-	q	l	
20	-	r	k	
21	-	s	j	
22	-	t	i	
23	-	u	h	
24	v	v	g	"middle" Vtap
25	-	w	f	
26	-	x	e	
27	-	y	d	
28	-	z	c	
29	-	aa	b	
30	-	bb	a	







Drawing Number	GSI-SIS100-QDM-1.6A-003	Ver.	v02
Object	SIS100 Quadrupole Module 1.6A		Page 3 of 3
Circuit	Connections in terminal boxes: TSH, TSV & TCH		

Comments: CH: chromaticity sextupole (horizontal); (SV+SH) - steering magnet: SV - vertical coil, SH - horizontal coil;
TSV - terminal box for steerer vertical coil, TSH - terminal box for steerer horizontal coil, TCH - terminal box for chromaticity sextupole;
for detail information (i.e. solder number) see technical drawing of the terminal box: MG-1009693-A-V01;

Author	P. Szwangruber (PBMT)	Date	2014-Nov-03
Revised	W. Freisleben (PBMT)	Date	2014-Nov-03