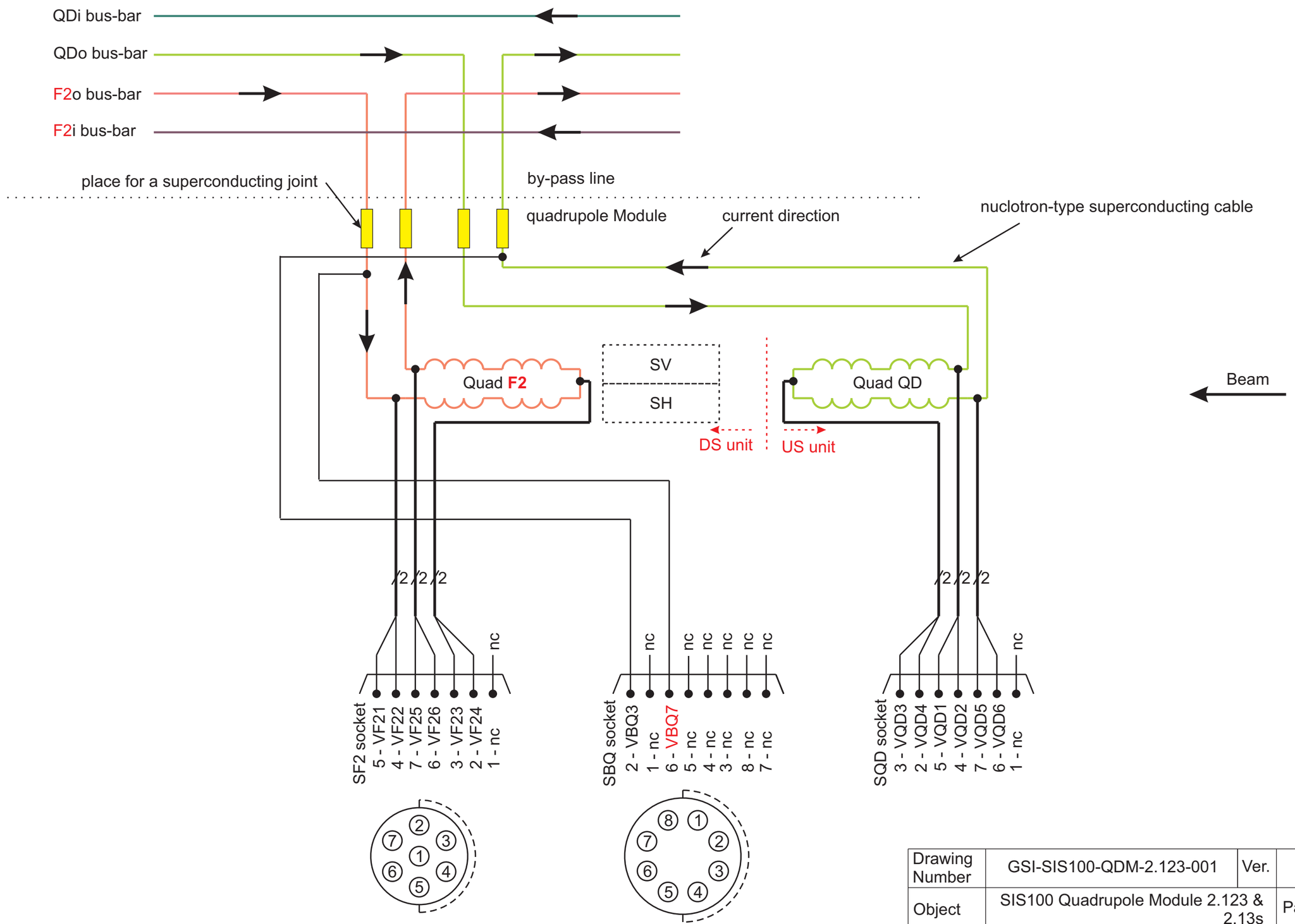
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sis100_qdm_2_123__16Jun2015.pdf modified 2015-07-01 11:41



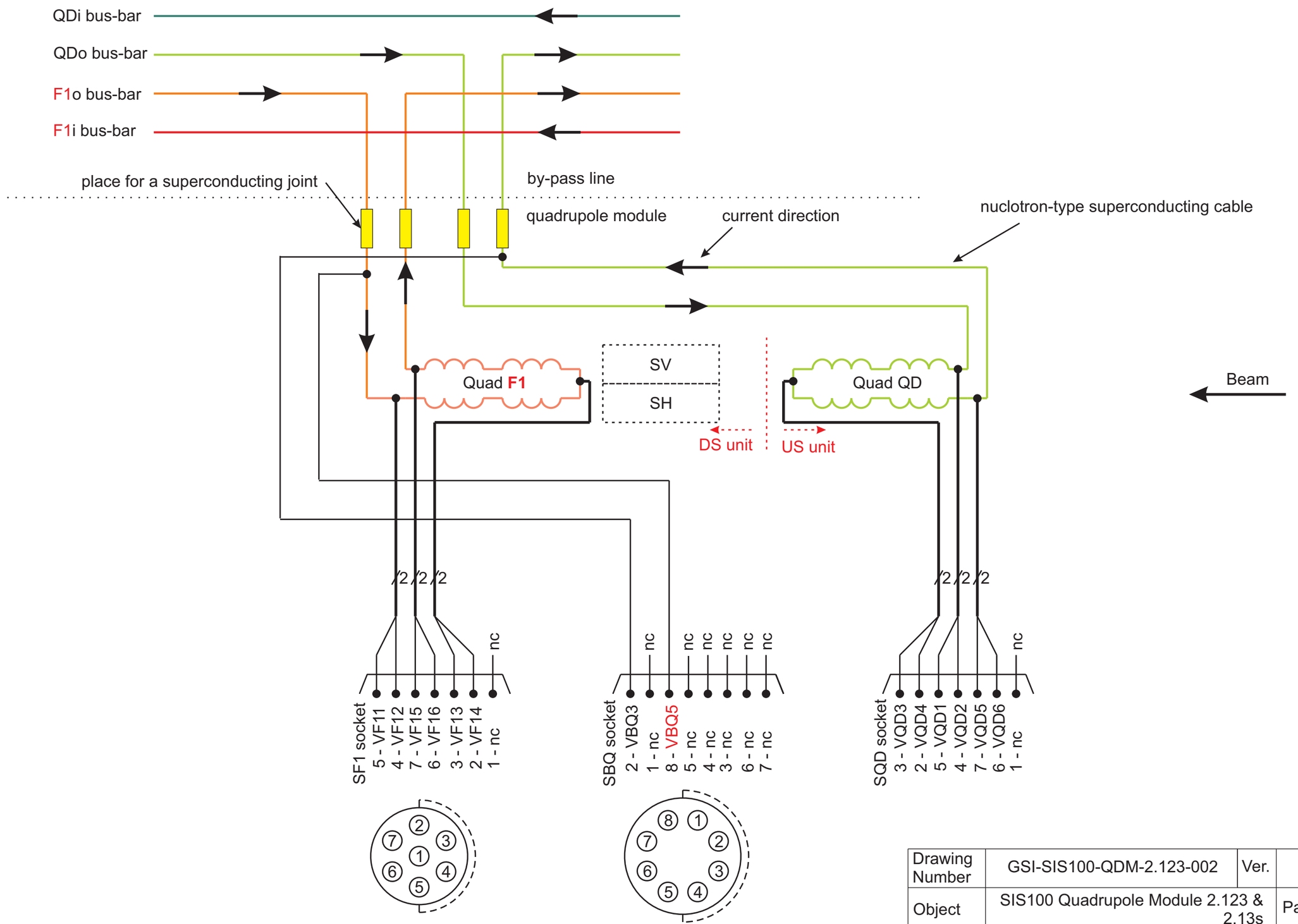
socket DEE 106A007-130
view of the soldering side
(Fischer Connectors)

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

to be applied in cells 2 and 3

Drawing Number	GSI-SIS100-QDM-2.123-001	Ver.	v05
Object	SIS100 Quadrupole Module 2.123 & 2.13s		Page 1 of 4
Circuit	Quadrupoles: F2/QD & voltage taps Main busbars & voltage taps Sockets: SBQ, SF2 & SQD		
Author	P. Szwangruber (PBMT)	Date	2015-Jun-16
Revised	W. Freisleben (PBMT)	Date	2015-Jun-16

Comments: 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 the instrumentation list;
nc - not connected; Attention: the connection of the module and voltage tap scheme is different for cell1 and for cells 2&3;
(SH+SV) - steering magnet; DS/US - beam down stream/up stream direction;



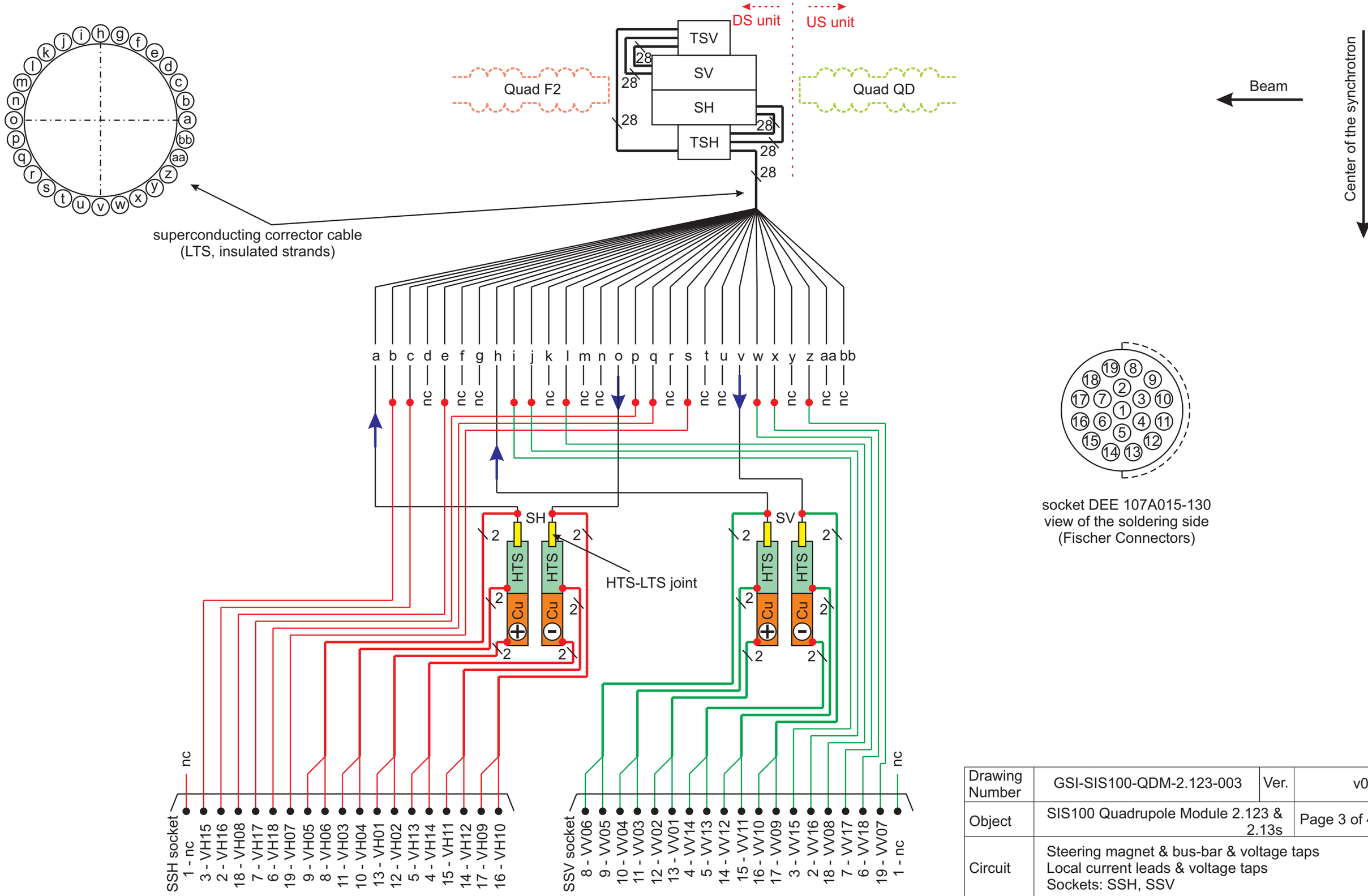
socket DEE 106A007-130
view of the soldering side
(Fischer Connectors)

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

to be applied in cell 1

Drawing Number	GSI-SIS100-QDM-2.123-002	Ver.	v05
Object	SIS100 Quadrupole Module 2.123 & 2.13s		Page 2 of 4
Circuit	Quadrupoles: F1/QD & voltage taps Main busbars & voltage taps Sockets: SBQ, SF1 & SQD		
Author	P. Szwangruber (PBMT)	Date	2015-Jun-16
Revised	W. Freisleben (PBMT)	Date	2015-Jun-16

Comments: 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 the instrumentation list;
nc - not connected; Attention: the connection of the module and voltage tap scheme is different for cell1 and for cells 2&3;
(SH+SV) - steering magnet; DS/US - beam down stream/up stream direction;



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

Drawing Number	GSI-SIS100-QDM-2.123-003	Ver.	v05
Object	SIS100 Quadrupole Module 2.123 & 2.13s		Page 3 of 4
Circuit	Steering magnet & bus-bar & voltage taps Local current leads & voltage taps Sockets: SSH, SSV		
Author	P. Szwangruber (PBMT)	Date	2015-Jun-16
Revised	W. Freisleben (PBMT)	Date	2015-Jun-16

Comments:

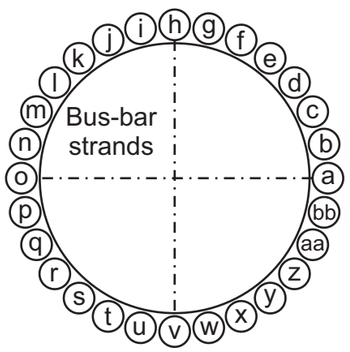
(SV+SH) - steering magnet: SV - vertical coil, SH - horizontal coil; (Cu+HTS) - local current lead;
TSV - terminal box for steerer vertical coil, TSH - terminal box for steerer horizontal coil;
nc - not connected; each socket shall receive its own voltage tap bundle; each socket pin (soldering side) 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);

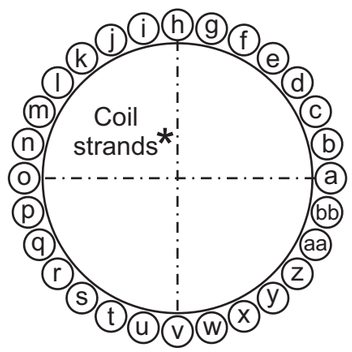
TSH

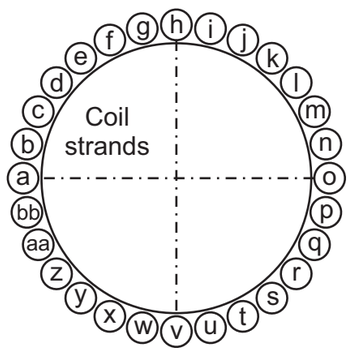
Solder number	Bus-bar strand	Coil strand* (current input)	Coil strand (current output)	Comments
1	a	a	-	current "+"
2	-	b	bb	
3	-	c	aa	
4	-	d	z	
5	-	e	y	
6	-	f	x	
7	-	g	w	
8	e	h	v	"middle" Vtap
9	-	i	u	
10	-	j	t	
11	-	k	s	
12	-	l	r	
13	-	m	q	
14	-	n	p	
15	b-c	-	o	MID "+" (x2)
16	p-q	o	-	MID "-" (x2)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







Drawing Number	GSI-SIS100-QDM-2.123-004	Ver.	v05
Object	SIS100 Quadrupole Module 2.123 & 2.13s		Page 4 of 4
Circuit	Connections in terminal boxes TSH & TSV		

Comments:

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

Author	P. Szwangruber (PBMT)	Date	2015-Jun-16
Revised	W. Freisleben (PBMT)	Date	2015-Jun-16