

We reserve all rights in this document and in the information contained therein. Reproduction, use or disclosure to third parties without express authority is strictly forbidden. Copr. ABB AB

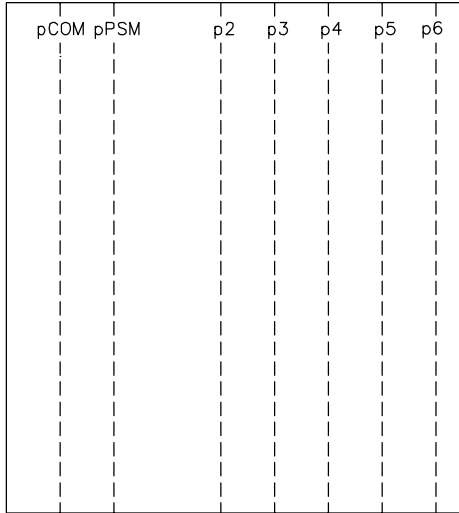
Table of contents

Part of product	Sheet
Designation for 6U, 1/2x19" casing with 1 TRM slot and 1 AIM slot	2
Communication module (COM)	3
Power supply module 48–125 VDC (PSM)	4
Power supply module 110–250 VDC, 100–240 VAC (PSM)	5
Transformer module (TRM)	6
Analog input module (AIM)	7
Binary input/output module (BIO)	8
Binary input/output module (BIO)	9

Based on		Prepared 2010-05-12	Agneta Rydh	Title Connection Diagram RET650 (3W/1CB) A05 IEC symbols		Doc.des.	Ref.des.				
		Approved 2011-12-08	Patrik Nyback			Doc.kind					
		Project		ABB ABB AB		Resp.dept.	PSNX/TPLA	Rev.ind.	B	Lang.	en
Rev	Rev. Note	Date	Name			Doc.No.	1MRK006501-FB		Sheet	1	
1		2				Cont.	2				

1/2x19"

Rear view slot



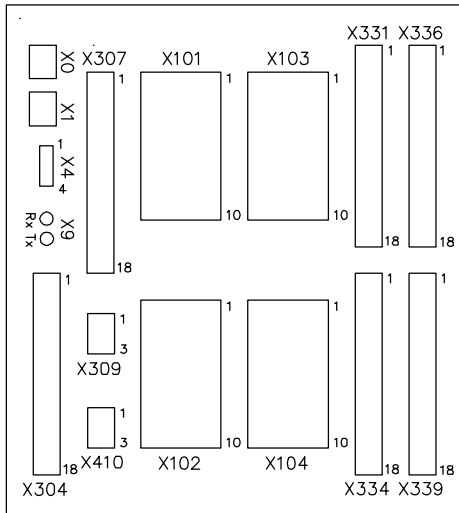
6U

Designation for 6U, 1/2x19" casing with 1 TRM and 1 AIM

Module	Slot	Terminal
COM	pCOM	X0, X1, X4, X9, X304
PSM	pPSM	X307, X309, X410
TRM	p2	X101, X102
AIM	p4	X103, X104
BIO	p5	X331, X334
BIO	p6	X336, X339

p= Position

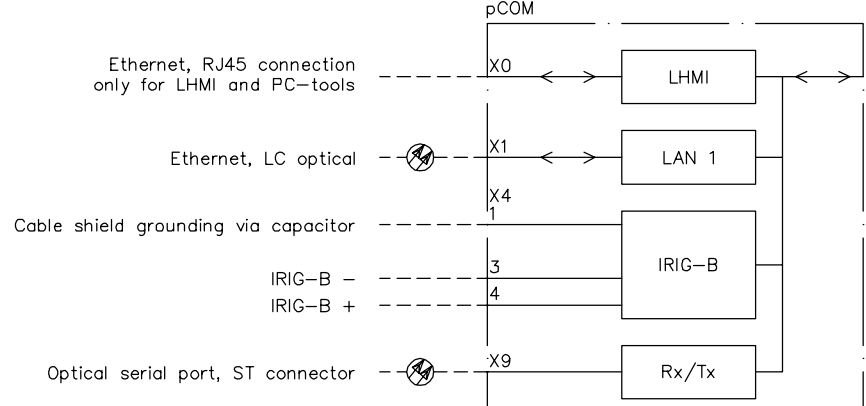
Rear view terminal



Based on		Prepared 2010-05-17	Agneta Rydh	Title Connection Diagram		Doc.des.	Ref.des.	
		Approved 2011-12-08	Patrik Nyback	RET650 (3W/1CB) A05		Doc.kind		
		Project			IEC symbols		Resp.dept. PSNX/TPLA	Rev.ind. B
					Lang. en		Sheet 2	
Rev	Rev. Note	Date	Name	ABB ABB AB		Doc.No. 1MRK006501-FB		Cont. 3
1		2						

We reserve all rights in this document and in the information contained therein. Reproduction, use or disclosure to third parties without express authority is strictly forbidden. Copr. ABB AB

Communication module (COM)



X304		CONFIGURATION
1	C1-4	
+ 2	BI01	// BUCHOLZ_TRIP
+ 3	BI02	// PRESSURE_TRIP
+ 4	BI03	// OIL_TMP_TRIP
+ 5	BI04	// WNDG_TMP_TRIP
6	C5-8	
+ 7	BI05	// W1_EXT_TRP_CB
+ 8	BI06	// W2_EXT_TRP_CB
+ 9	BI07	// W3_EXT_TRP_CB
+ 10	BI08	// EXT_TRP_TRAFO
11	C9-11	
+ 12	BI09	// W1_START_BRF
+ 13	BI10	// W2_START_BRF
+ 14	BI11	// W3_START_BRF
15	C12-14	
+ 16	BI12	// TC_AUTOCTRL
+ 17	BI13	// EXT_START_DR
+ 18	BI14	// ACTV_TESTMODE



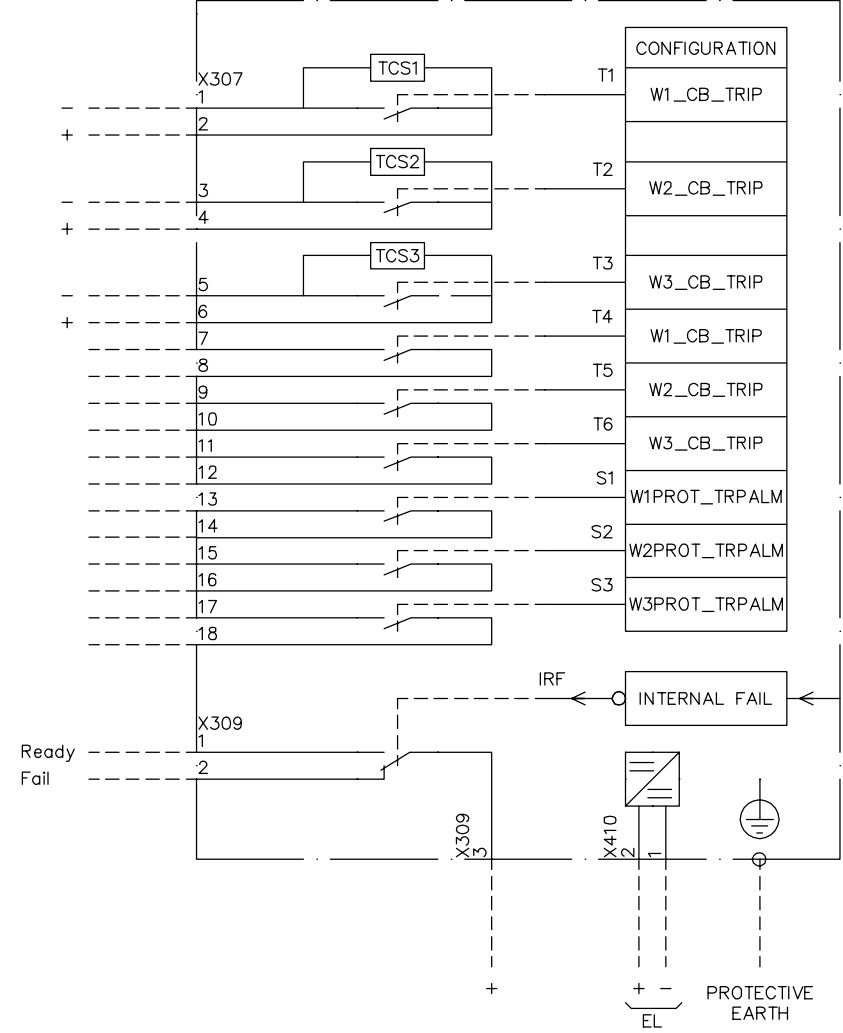
Observe polarity sequence of RL connectors

Based on		Prepared 2010-05-12	Agneta Rydh	Title Connection Diagram		Doc.des.	Ref.des.	
		Approved 2011-12-08	Patrik Nyback	RET650 (3W/1CB) A05		Doc.kind		
		Project		IEC symbols		Resp.dept.	PSNX/TPLA	Rev.ind. B
						Lang.	en	
Rev	Rev. Note	Date	Name	ABB		Doc.No. 1MRK006501-FB		Sheet 3
1		2						Cont. 4

We reserve all rights in this document and in the information contained therein. Reproduction, use or disclosure to third parties without express authority is strictly forbidden. Copr. ABB AB

Power supply module 48–125 VDC (PSM)

pPSM



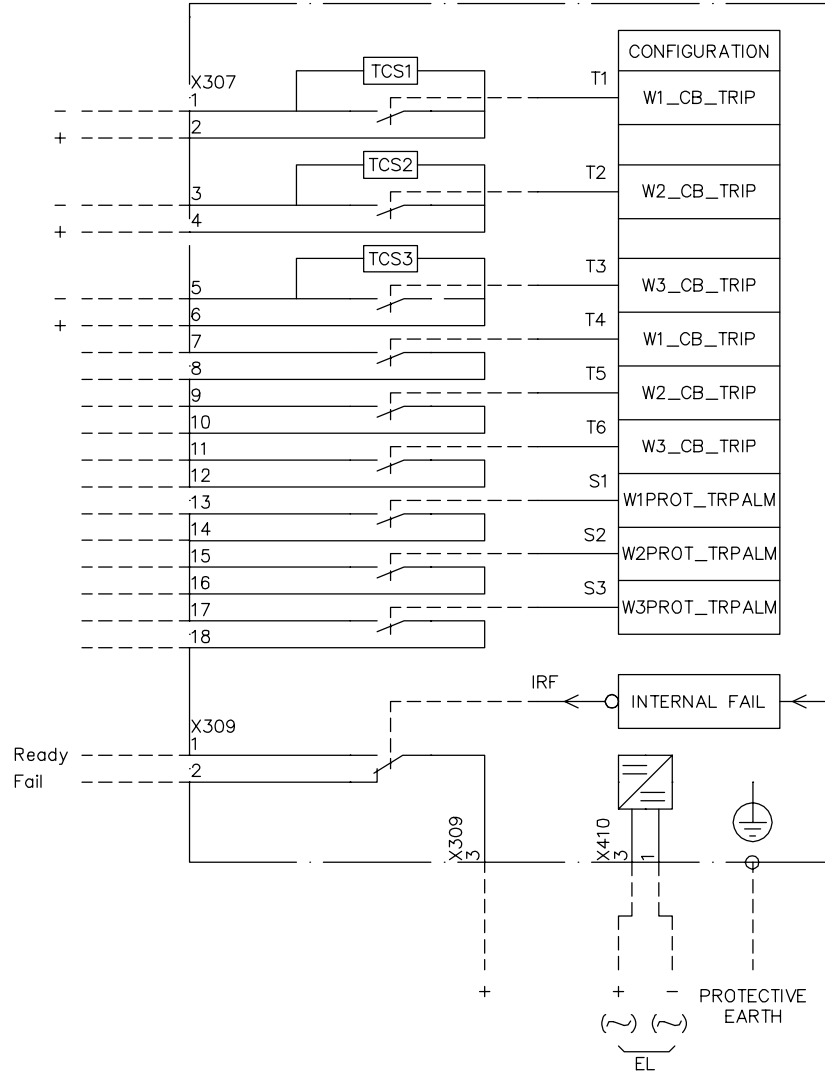
Observe polarity sequence

Based on		Prepared 2010-05-12	Agneta Rydh	Title Connection Diagram		Doc.des.	Ref.des.	
		Approved 2011-12-08	Patrik Nyback	RET650 (3W/1CB) A05		Doc.kind		
		Project		IEC symbols		Resp.dept.	PSNX/TPLA	Rev.ind. B
Rev	Rev. Note	Date	Name	ABB		Doc.No. 1MRK006501-FB		Lang. en
1		2				Sheet 4		
						Cont. 5		

We reserve all rights in this document and in the information contained therein. Reproduction, use or disclosure to third parties without express authority is strictly forbidden. Copr. ABB AB

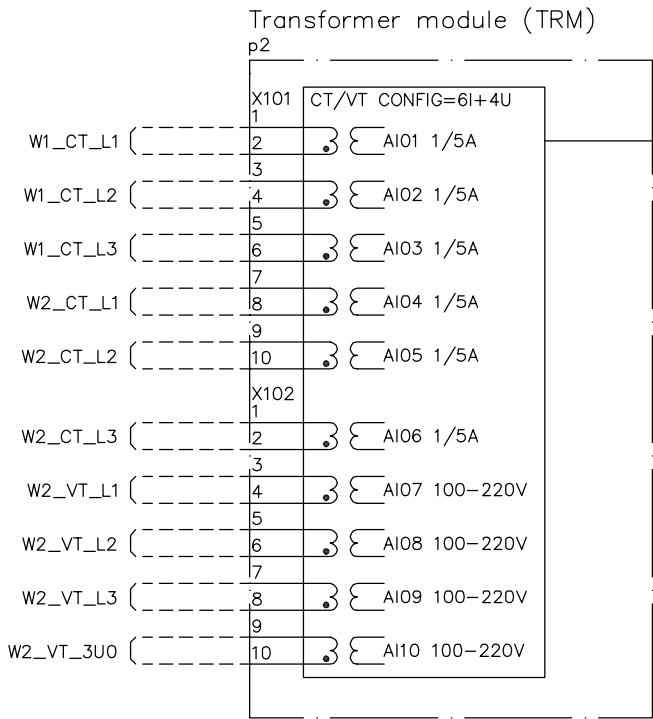
Power supply module 110–250 VDC, 100–240 VAC (PSM)

pPSM



Observe polarity sequence

Based on		Prepared 2010-05-12	Agneta Rydh	Title Connection Diagram		Doc.des.	Ref.des.	
		Approved 2011-12-08	Patrik Nyback	RET650 (3W/1CB) A05		Doc.kind		
		Project		IEC symbols		Resp.dept.	PSNX/TPLA	Rev.ind. B
								Lang. en
Rev	Rev. Note	Date	Name	ABB		Doc.No. 1MRK006501-FB		Sheet 5
1		2						Cont. 6

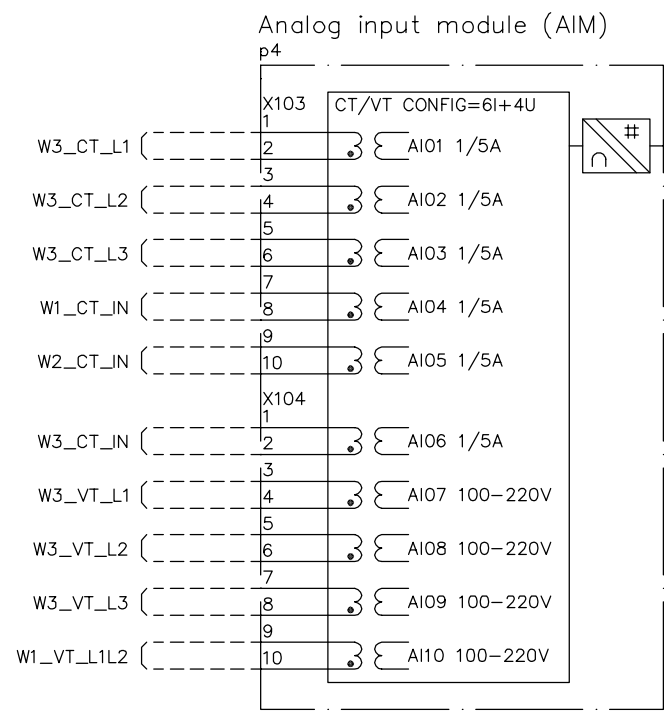


Compression or ringlug terminals.

- Indicates high polarity. Note that internal polarity can be adjusted by setting of analog input CT neutral direction and or on SMAI pre-processing function blocks.

Based on		Prepared 2010-05-12	Agneta Rydh	Title Connection Diagram		Doc.des.	Ref.des.	
		Approved 2011-12-08	Patrik Nyback	RET650 (3W/1CB) A05		Doc.kind		
		Project		IEC symbols		Resp.dept.	PSNX/TPLA	Rev.ind. B
				ABB ABB AB		Doc.No. 1MRK006501-FB		Lang. en
Rev	Rev. Note	Date	Name			Sheet 6		
1		2				Cont. 7		

We reserve all rights in this document and in the information contained therein. Reproduction, use or disclosure to third parties without express authority is strictly forbidden. Copr. ABB AB



Compression or ringlug terminals

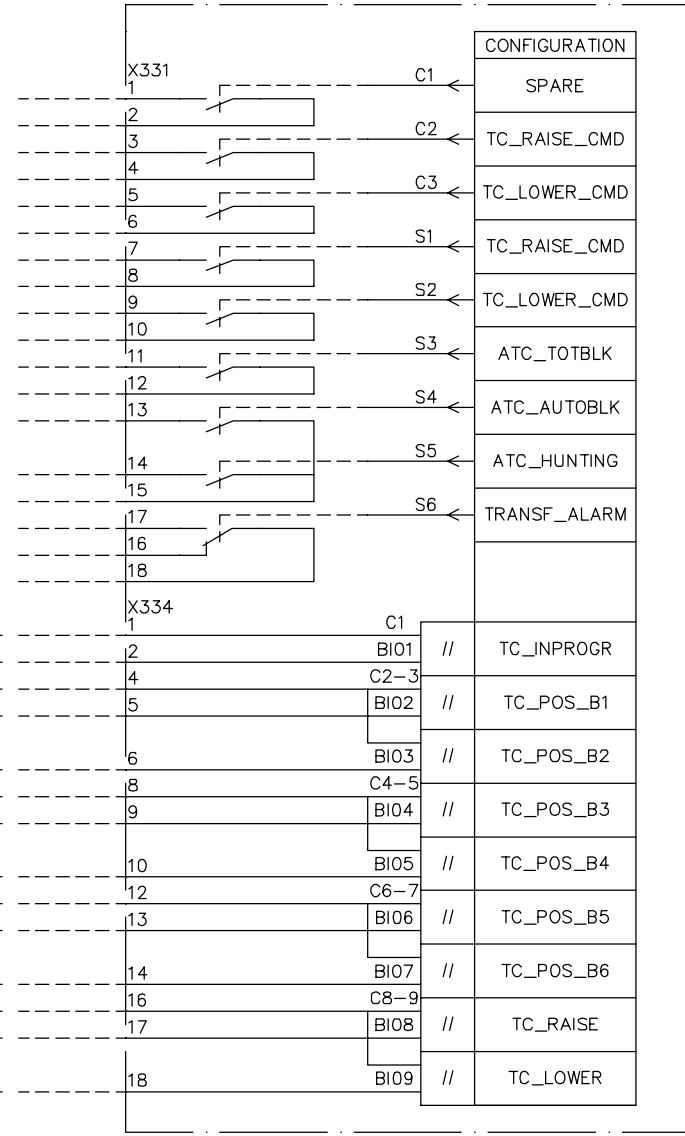
- Indicates high polarity. Note that internal polarity can be adjusted by setting of analog input CT neutral direction and or on SMAI pre-processing function blocks.

Based on		Prepared 2010-05-12	Agneta Rydh	Title Connection Diagram RET650 (3W/1CB) A05 IEC symbols		Doc.des.	Ref.des.	
		Approved 2011-12-08	Patrik Nyback			Doc.kind		
		Project			Resp.dept.	PSNX/TPLA	Rev.ind.	B Lang. en
Rev	Rev. Note	Date	Name	ABB ABB AB		Doc.No. 1MRK006501-FB		Sheet 7
1		2						Cont. 8

We reserve all rights in this document and in the information contained therein. Reproduction, use or disclosure to third parties without express authority is strictly forbidden. Copr. ABB AB

Binary input/output module (BIO)

p5



Observe polarity sequence of RL connectors

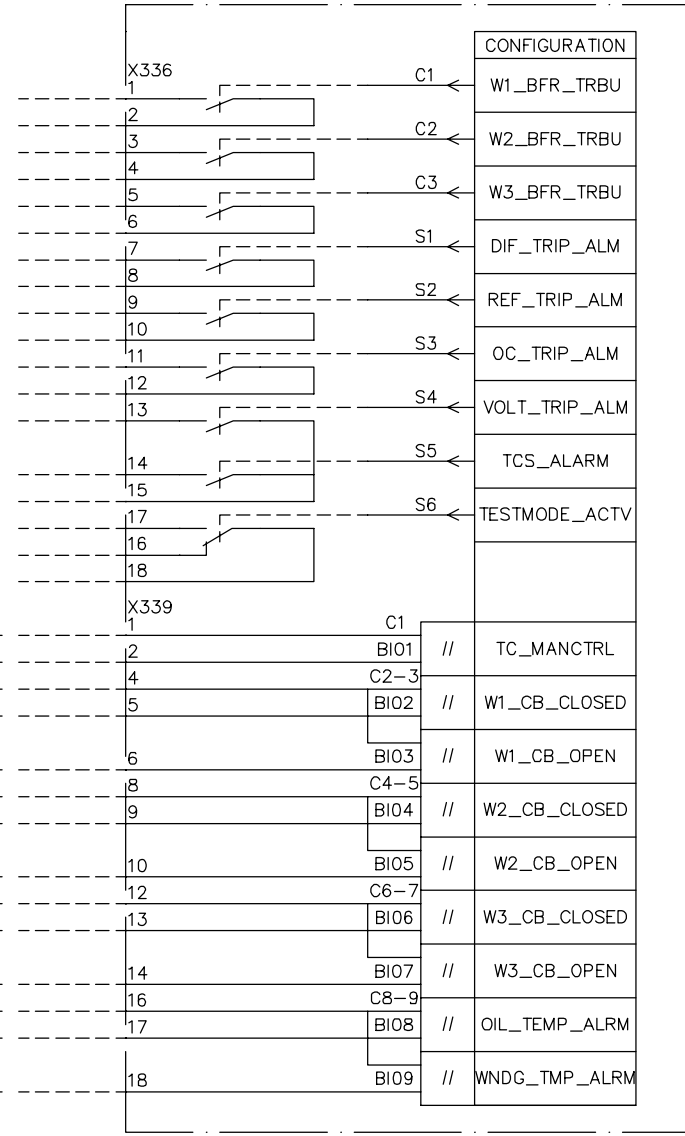
RL

Based on		Prepared 2010-05-12	Agneta Rydh	Title Connection Diagram		Doc.des.	Ref.des.	
		Approved 2011-12-08	Patrik Nyback	RET650 (3W/1CB) A05		Doc.kind		
		Project		IEC symbols		Resp.dept.	PSNX/TPLA	Rev.ind. B
				ABB		1MRK006501-FB		Lang. en
Rev	Rev. Note	Date	Name			ABB AB	Doc.No.	Sheet 8

We reserve all rights in this document and in the information contained therein. Reproduction, use or disclosure to third parties without express authority is strictly forbidden. Copr. ABB AB

Binary input/output module (BIO)

p6



Observe polarity sequence of RL connectors

RL

Based on		Prepared 2010-05-12	Agneta Rydh	Title Connection Diagram		Doc.des.	Ref.des.	
		Approved 2011-12-08	Patrik Nyback	RET650 (3W/1CB) A05		Doc.kind		
		Project		IEC symbols		Resp.dept.	PSNX/TPLA	Rev.ind. B
				ABB		1MRK006501-FB		Lang. en
Rev	Rev. Note	Date	Name			Doc.No.		
1		2		5	6	7	8	Cont. -