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ABB Automation Technologies AB Robotics SE-721 68 Västerås Sweden

Latest revision: ECO 70147, WI 7698

Page 224-231: Adjusted, "Type Se" was "Type S" Page 316-321: Adjusted, "Type H" was "Type S"

DMRO SE

IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5

Status: 2015-03-04 APPROVED

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Document no.

Rev. Ind Page 1 3HAC026209-001

Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04

DRESS PACK

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Customer Robot serial number(s): Drawing number Drawing version Manufacture Type of installation Control cabinet Mains voltage Control voltage Year of construction Project start Project manager Last revision Designed by Designed date Number of pages

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Page 224-231: Adjusted, "Type Se" was "Type S" Page 316-321: Adjusted, "Type H" was "Type S"

Lab/Office: DMRO SE PRMP

IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5

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TITLE PAGE

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IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5

APPROVED Document no.

Status: 2015-03-04

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DP	Se	AX3	205	CUSTOMER SIGNALS, CANBUS	APPROVED	2008-06-30	semitot
DP	Se	AX3	206	CUSTOMER SIGNALS, ETHERNET	APPROVED	2009-12-04	seermes
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IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5

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DP	Н		319	CUSTOMER SIGNALS, CANBUS - MH6	APPROVED	2013-12-06	seermes
DP	Н		320	CUSTOMER SIGNALS, ETHERNET - MH6	APPROVED	2013-12-06	seermes
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IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5

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IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5

Status: 2015-03-04 **APPROVED** 

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R3.ETHERNET R3.WELD XS/XP101 R3.CP/CS R3.CBUS Axis 2 Axis 1 R1.WELD Base R1.CP/CS/CBUS R1.CP/CS **ROBOT SIGNALS, 24VDC SUPPLY R1.ETHERNET BUS SIGNALS** Latest revision: ECO 70147, WI 7698

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SPOT WELDING

**CABINET** 

XP/XS113

SINGLE CABINET

CONTROLLER

CANBUS INTERFACE

XP/XS103

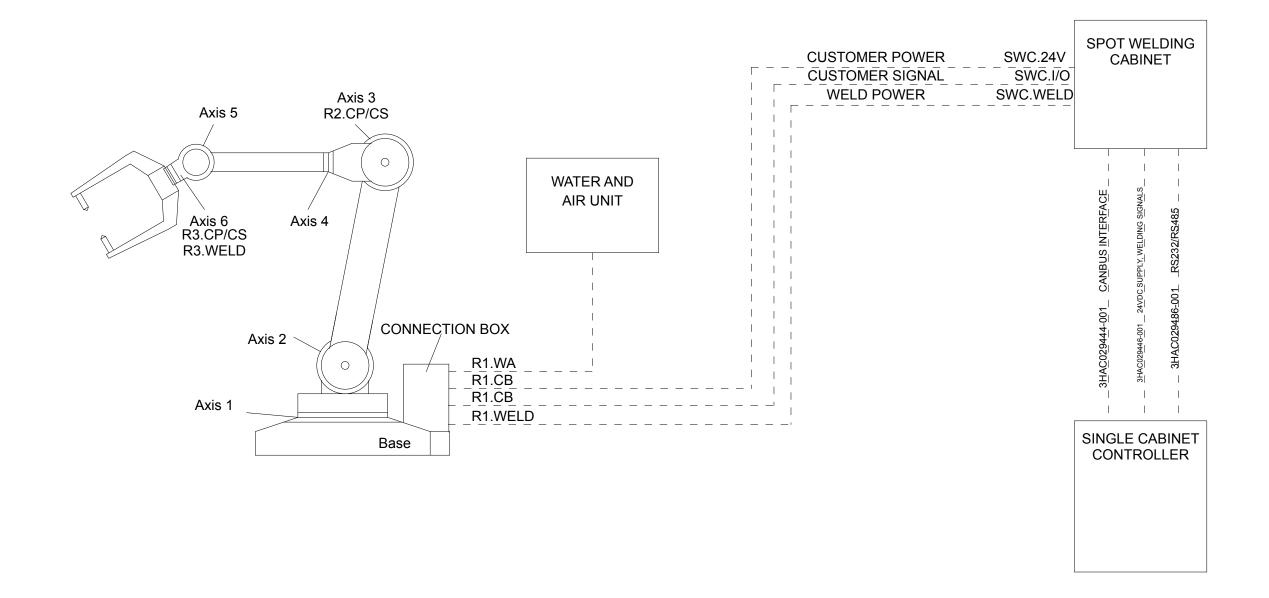
XP/XS13

XP/XS9

X101

BLOCK DIAGRAM TYPE S (pneumatic gun) **IRBDP SW5** 

Single cabinet controller, IRC5: See circuit diagram, 3HAC024480-004. Dashed cables: See circuit diagram SpotPack, 3HAC026208-001



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REGION E

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IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5

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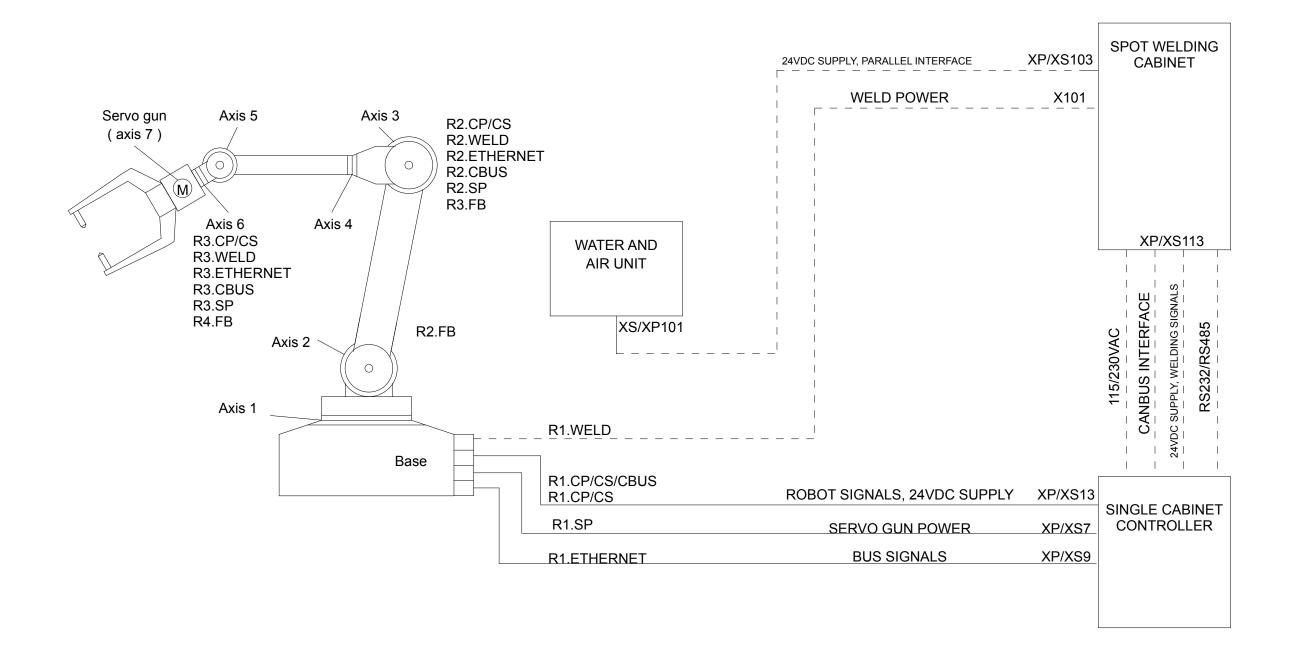
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BLOCK DIAGRAM TYPE S - IRBDP SW5 3HAC026209-001 DRESS PACK

Rev. Ind Page51 Next +Se/52 Single cabinet controller, IRC5: See circuit diagram, 3HAC024480-004. Dashed cables: See circuit diagram SpotPack, 3HAC026208-001



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DMRO SE PRMP BLOCK DIAGRAM - TYPE Se

IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5

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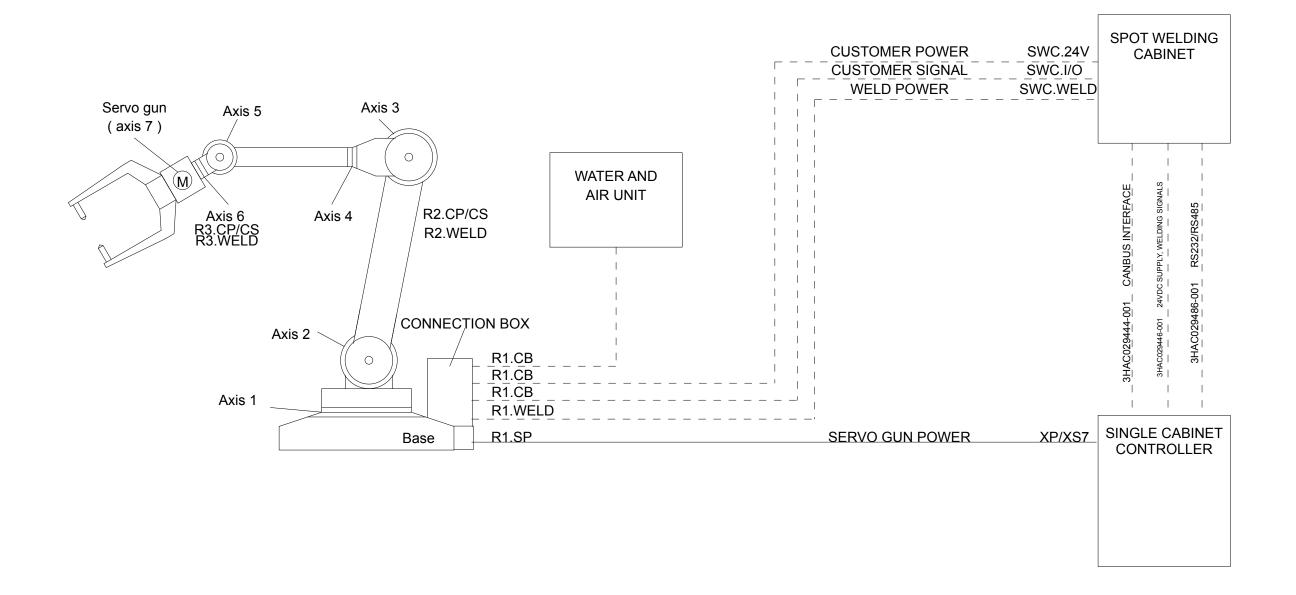
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BLOCK DIAGRAM TYPE Se (servo gun) **IRBDP SW5** 

Single cabinet controller, IRC5: See circuit diagram, 3HAC024480-004. Dashed cables: See circuit diagram SpotPack, 3HAC026208-001



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REGION E

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IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 BLOCK DIAGRAM TYPE Se - IRBDP SW5

DRESS PACK

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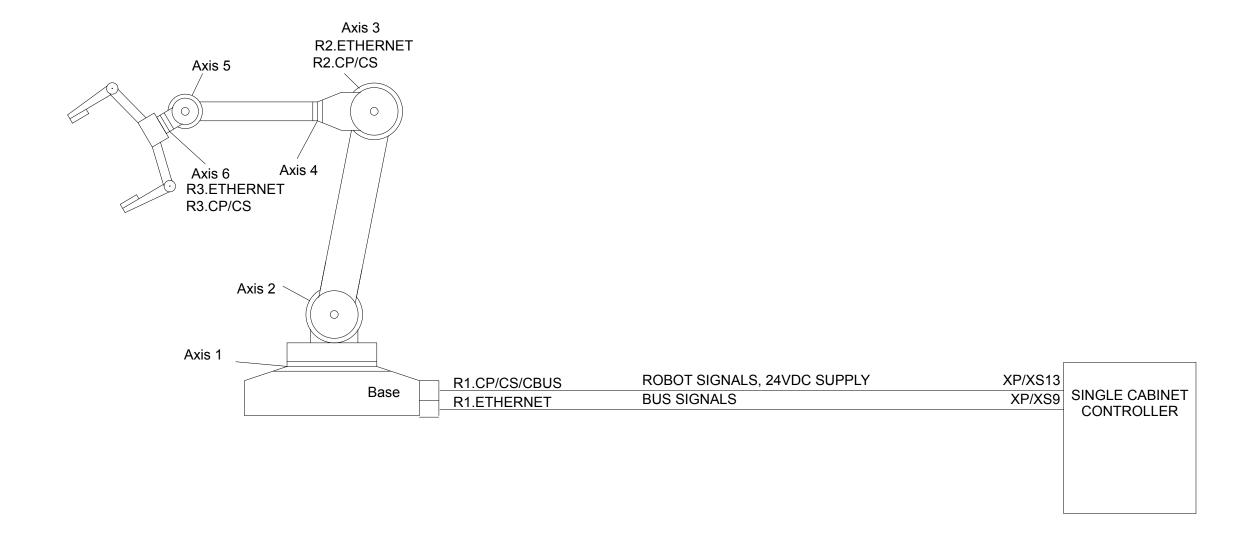
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**BLOCK DIAGRAM TYPE H** 

IRBDP SW2

Single cabinet controller, IRC5: See circuit diagram, 3HAC024480-004.



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IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5

Status: 2015-03-04 APPROVED

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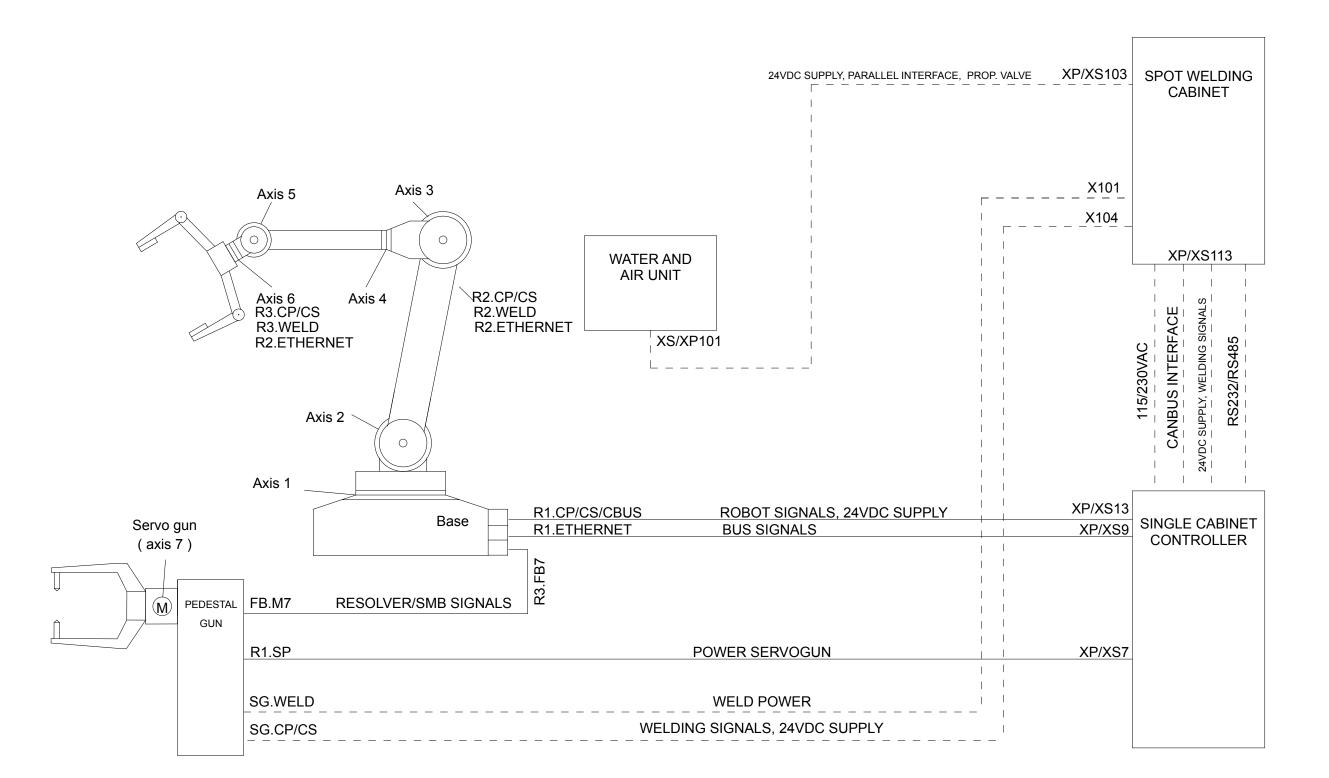
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DRESS PACK

BLOCK DIAGRAM - TYPE H

BLOCK DIAGRAM TYPE HS (material handling and pneumatic gun) **IRBDP SW2** Single cabinet controller, IRC5: See circuit diagram, 3HAC024480-004. Dashed cables: See circuit diagram SpotPack, 3HAC026208-001 SPOT WELDING 24VDC SUPPLY, PARALLEL INTERFACE, PROP. VALVE XP/XS103 **CABINET** Axis 3 **R2.ETHERNET** X101 Axis 5 R2.CP/CS 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. © Copyright 2003 ABB X104 0 XP/XS113 WATER AND **AIR UNIT** Axis 4 Axis 6 CANBUS INTERFACE R3.ETHERNET R3.CP/CS XS/XP101 Axis 2 Axis 1 ROBOT SIGNALS, 24VDC SUPPLY XP/XS13 R1.CP/CS/CBUS Base SINGLE CABINET XP/XS9 **BUS SIGNALS R1.ETHERNET** CONTROLLER PEDESTAL GUN WELD POWER SG.WELD SG.CP/CS WELDING SIGNALS, 24VDC SUPPLY Status: 2015-03-04 = SP Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE PRMP Page 224-231: Adjusted, "Type Se" was "Type S" + HS Location: **APPROVED** Page 316-321: Adjusted, "Type H" was "Type S" Sublocation:+ BLOCK DIAGRAM - TYPE HS Document no. Rev. Ind Page55 Next +HSe/5 3HAC026209-001 DRESS PACK Prepared by, date: EM 2015-02-17 | Approved by, date: JEN 2015-03-04

Single cabinet controller, IRC5: See circuit diagram, 3HAC024480-004. Dashed cables: See circuit diagram SpotPack, 3HAC026208-001



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DMRO SE

IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5

BLOCK DIAGRAM - TYPE HSe

DRESS PACK

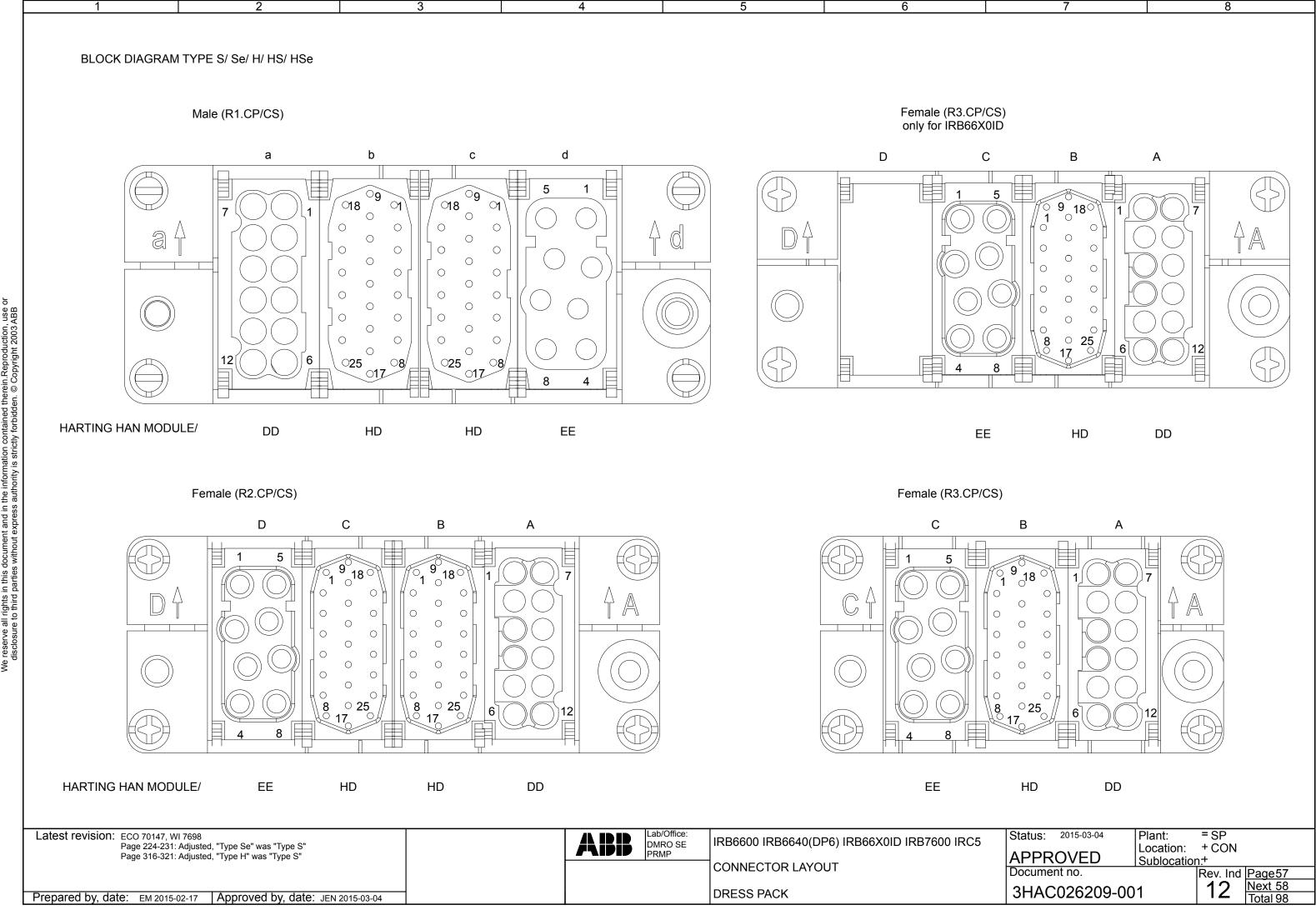
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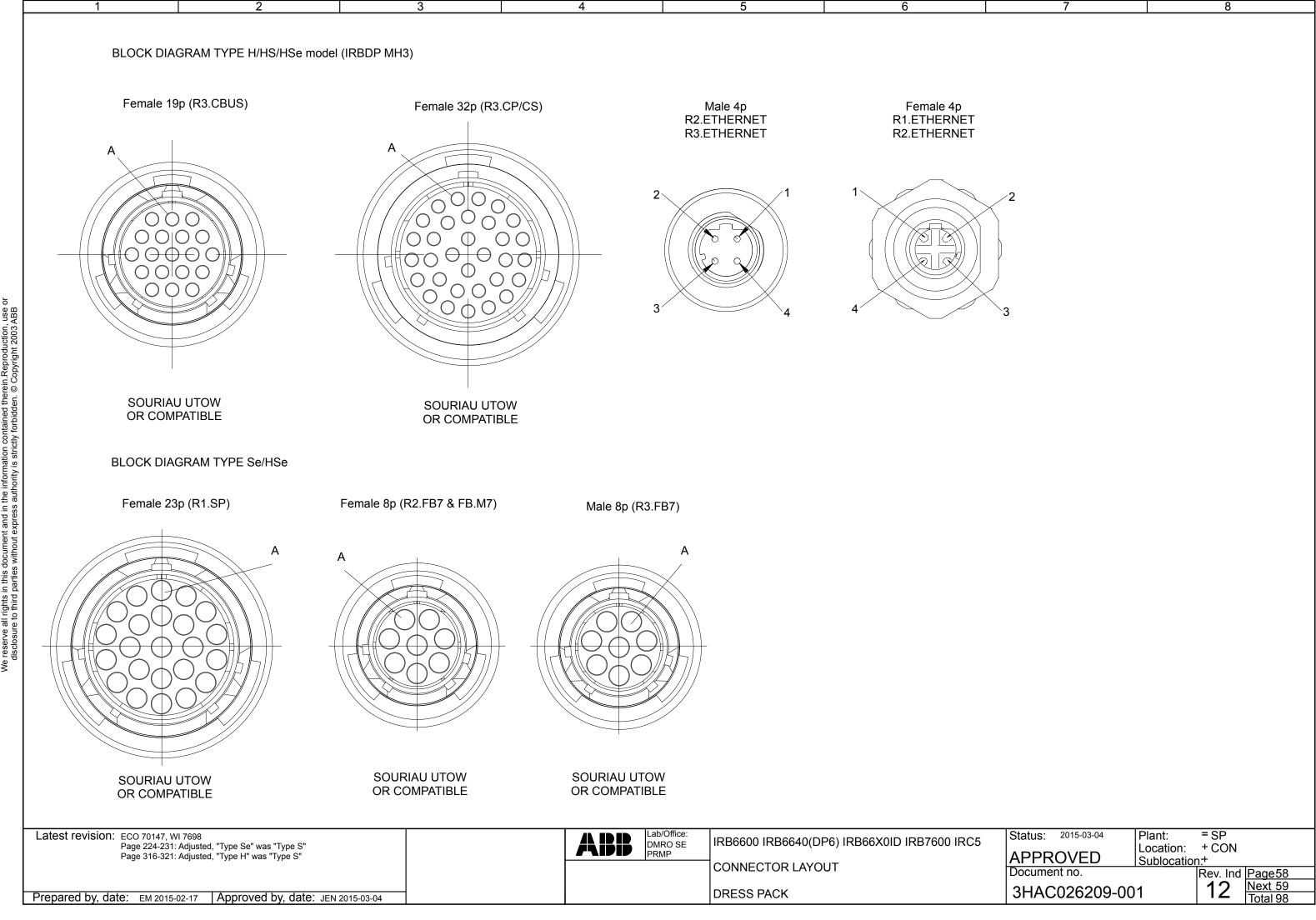
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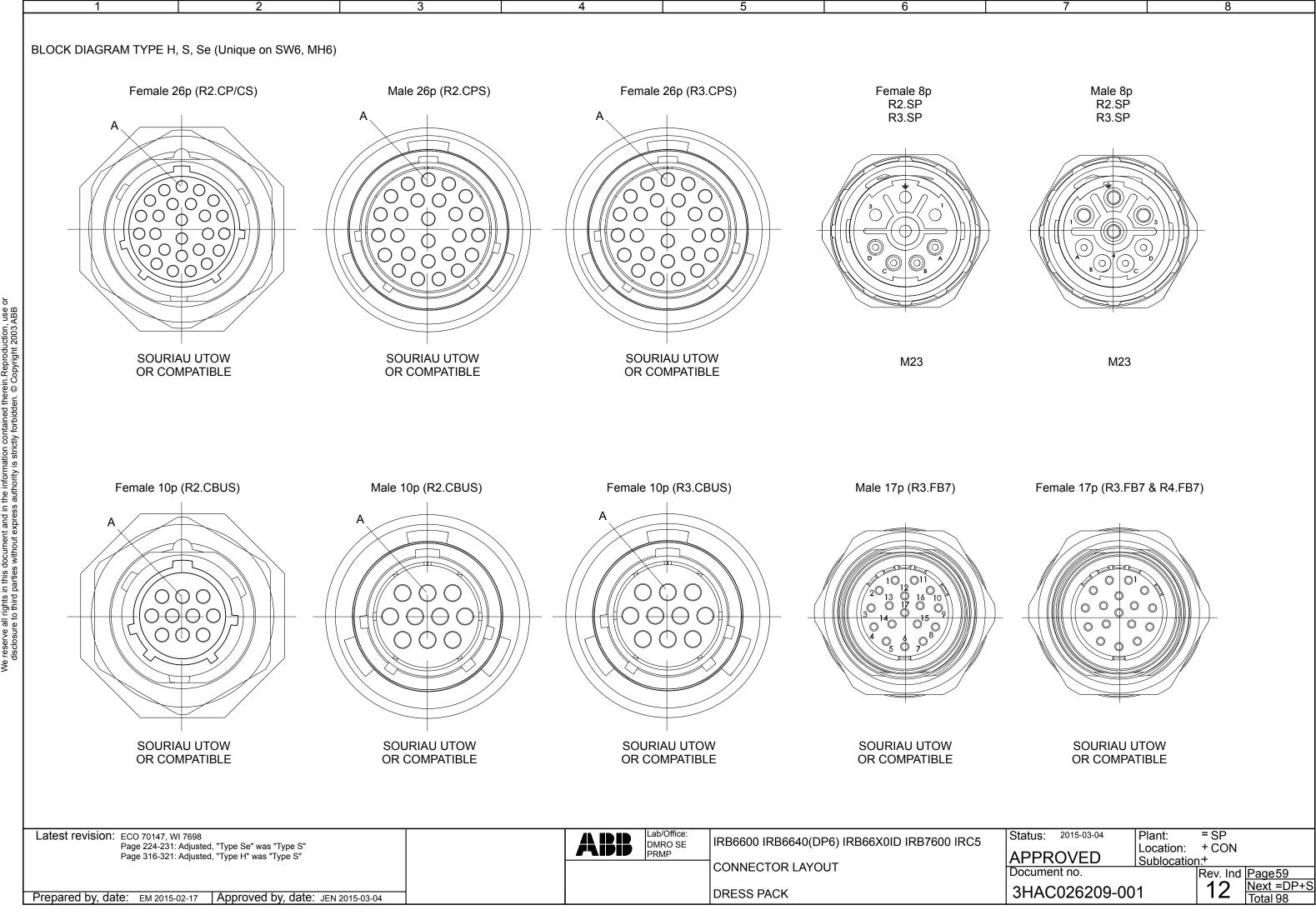
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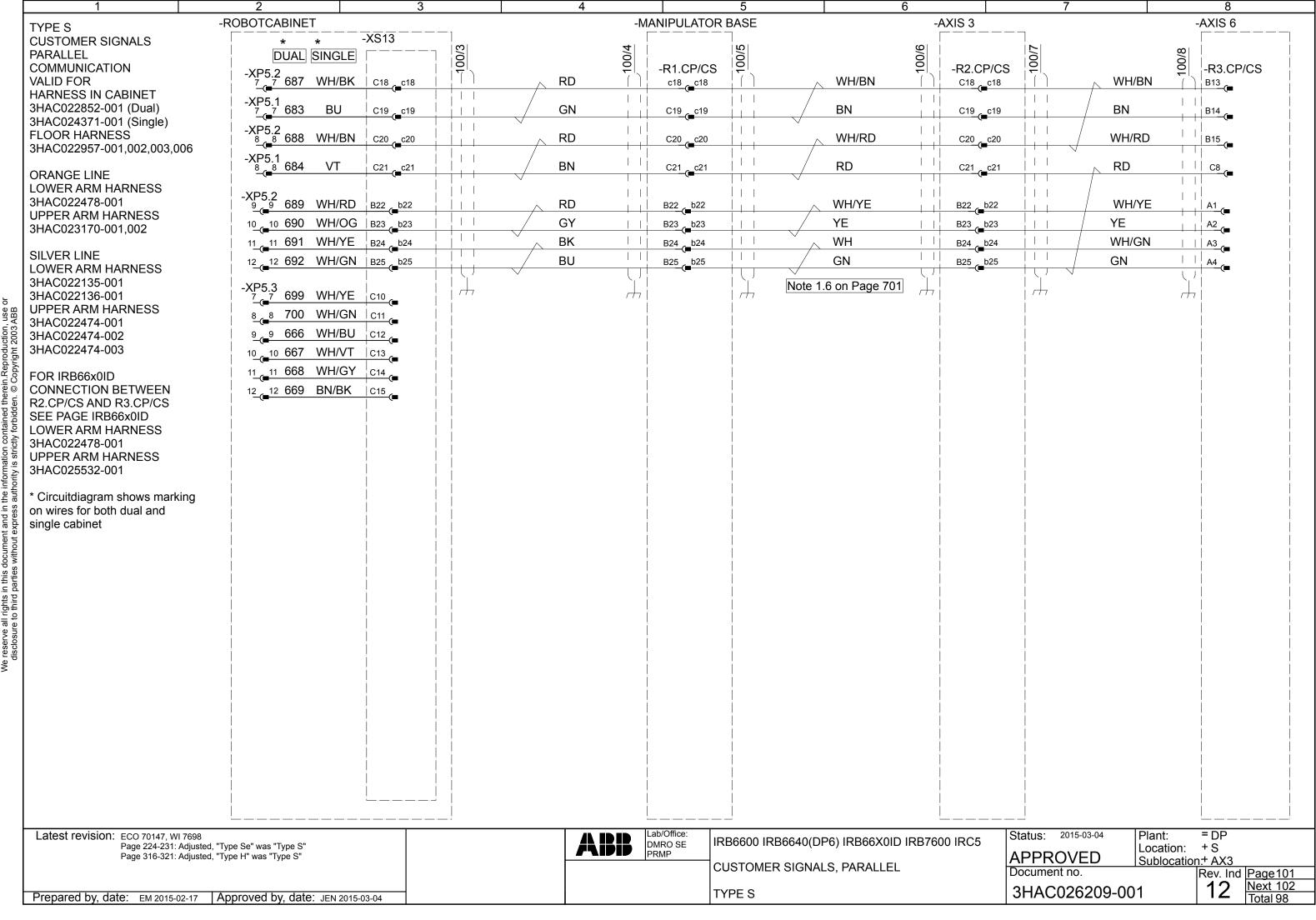
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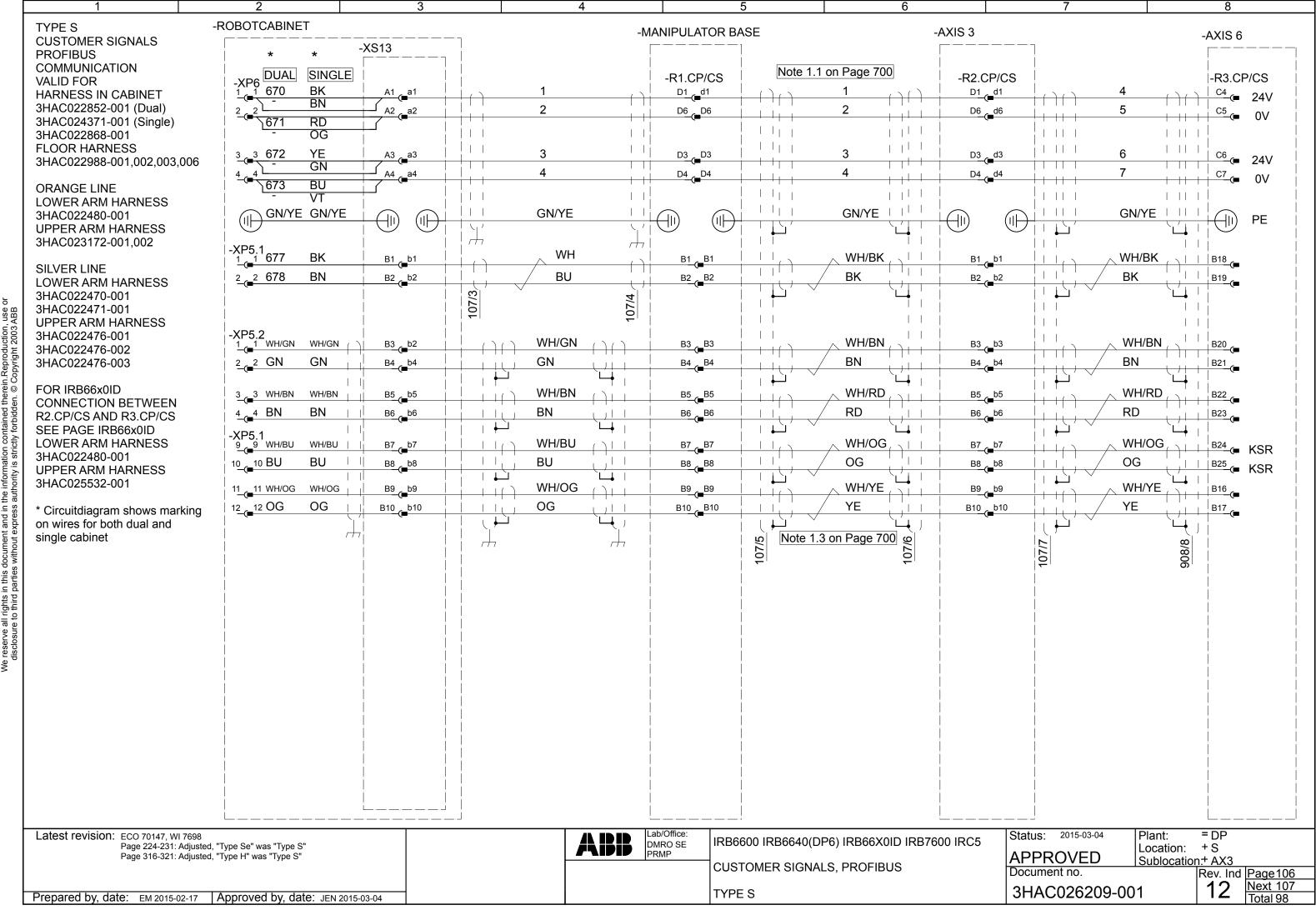




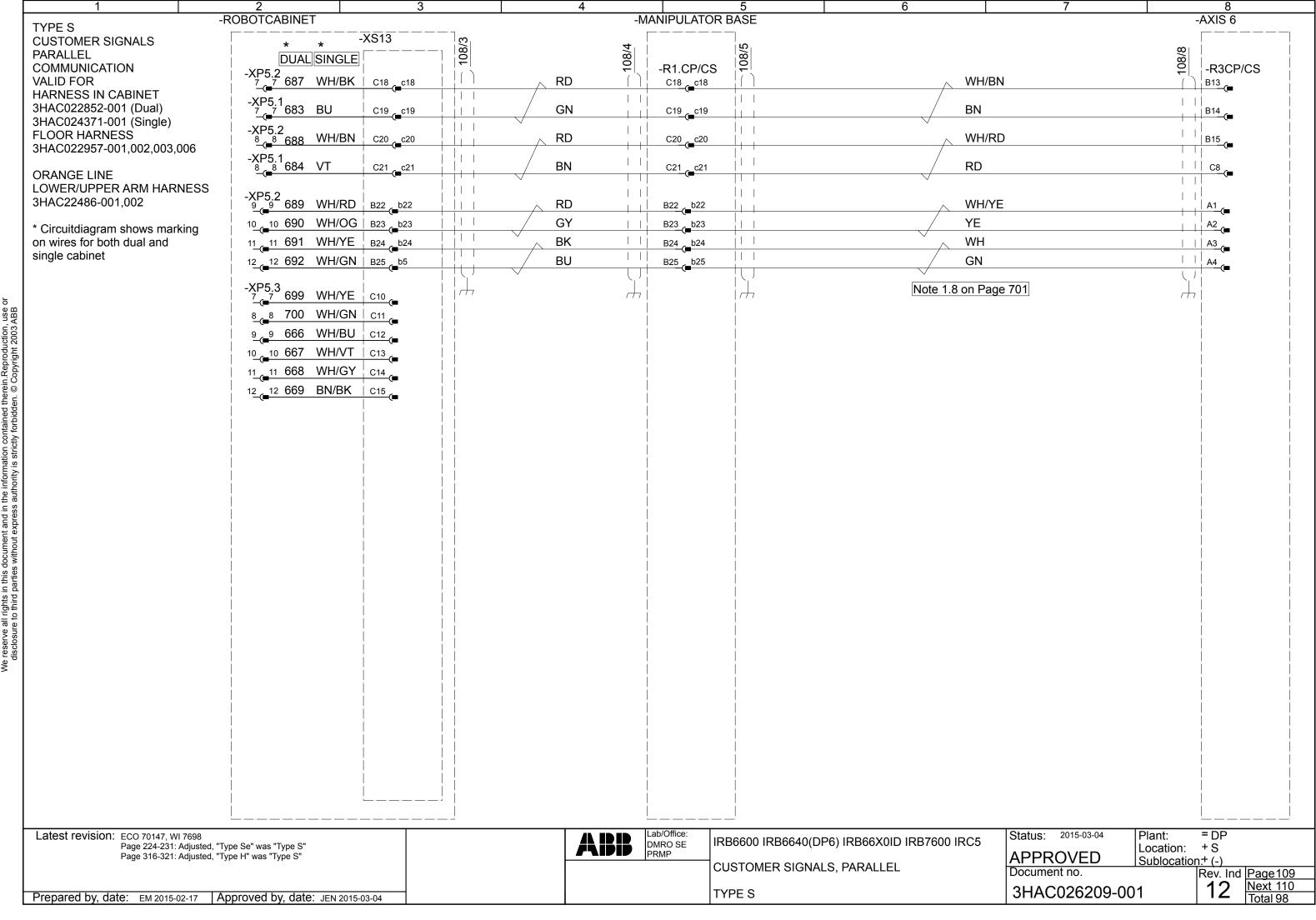
6 -ROBOTCABINET -MANIPULATOR BASE -AXIS 3 -AXIS 6 TYPE S -XS13 -R2.CP/CS 2 **CUSTOMER SIGNALS** DUAL SINGLE -R3.CP/CS -R1.CP/CS -XP5. **CANBUS** 679 RD WH WH/GN WH/GN B11\_\_b11 B11 \_\_b11 B11\_\_b11 B1\_ COMMUNICATION OG GN B2\_( 680 OG GN B12 b12 **VALID FOR** b12\_b12 B12\_b12 WH WH/BU HARNESS IN CABINET 681 YE B13 b13 WH/BU B13\_b13 B13\_b13 B3\_( 3HAC022852-001 (Dual) GN BU B4\_**(**■ GN B14 b14 682 B14 b14 B14\_b14 BU 3HAC024371-001 (Single) 3HAC022866-001 -XP5.3 WH/VT WH B5\_( 693 GΥ WH/VT B15\_b15 B15 b15 B15 \_\_b15 **FLOOR HARNESS** BN VT  $\perp$ 3HAC022978-001,002,003,006 694 WH VT B16 b16 B16 \_\_b16 B16\_b16 WH WH/GY 3 695 WH/BK WH/GY B18\_b18 B18\_\_b18 B18 \_\_b18 **ORANGE LINE** GY GY 696 WH/BN GΥ LOWER ARM HARNESS B19 b19 b19\_b19 B19\_b19 3HAC022480-001 RD WH/BK <u>B9</u> 697 WH/RD WH/BK B20 b20 B20 b20 B20\_b20 **UPPER ARM HARNESS** B10 BU BK 698 WH/OG B21 b21 B21 b21 BK B21 b21 3HAC023172-001,002 -XP5.2 <u>5</u>5 685 RD WH/OG WH/OG | | B11\_( GΥ C16\_c16 C16\_c16 C16 c16 SILVER LINE B12 LOWER ARM HARNESS OG <u>6 68</u>6 OG OG WH C17\_c17 C17\_c17 C17\_c17 3HAC022470-001 RD 687 WH/BK WH/BN WH/BN C18 c18 C18 \_ c18 C18\_c18 B13 3HAC022471-001 **UPPER ARM HARNESS** -XP5<u>.</u>1 | | B14 GN BN BN BU 683 C19\_c19 C19\_c19 C19\_c19 3HAC022476-001 3HAC022476-002 -XP5.2 RD | | B15 WH/RD WH/BN C20 c20 WH/RD 3HAC022476-003 688 C20\_c20 C20\_c20 -XP5.1 BN RD FOR IRB66x0ID 684 VT RD C21 c21 C21\_c21 C21\_c21 C8\_ **CONNECTION BETWEEN** R2.CP/CS AND R3.CP/CS SEE PAGE IRB66x0ID -A35.X2 RD WH/BK WH/BK A1 RD RD F1\_F1 B22 b22 B22 b22 LOWER ARM HARNESS +24V CAN BK BK BK <u>1\_1 B</u>K A2\_( BK 3HAC022480-001 F2 F2 B23\_b23 B23\_b23 0V CAN **UPPER ARM HARNESS** 3HAC025532-001 -XP5.2 11\_\_\_11 691 BK WH/BN WH/BN A3\_(= WH/YE B24 B24 B24\_\_b24 B24\_b24 \* Circuitdiagram shows marking 12 692 BU BN BN WH/GN B25 B25 B25\_b25 B25\_b25 A4 on wires for both dual and WH/RD B22\_( 689 single cabinet 10 690 WH/OG B23 -A35.X2 <sup>4</sup>
<sub>(■</sub>
<sup>4</sup> YΕ WH 5 YE 5 <u>A7</u>(■ WH A3 \_\_a3 A3 \_\_a3 F3 F3 CAN\_H BU YΕ YΕ <u>A8</u> BU F4\_F4 BU CAN L BK 699 WH/YE 7 VT 7 VT C10 \_\_c10 8 VT OG 8 VT A10 WH/GN 700 C11 \_\_c11 A6\_\_a6  $\perp$ BK GN GN 1 1 <u>A5</u> (■ 666 WH/BU C12 c12 A9\_\_a9 A9\_a9 2 2 GN GN GN 10 667 <u>A6</u> WH/VT A10\_a10 C13 c13 A10\_a10 | | | A11\_( BK 3 GN 3 GN 11 668 WH/GY C14\_c14 A11\_a11 BN GN 4 GN 4 BN/BK A12\_ 12 12 669 A12\_a12 C15 c15 A12\_a12 Status: 2015-03-04 Lab/Office = DP Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" + S Location: Page 316-321: Adjusted, "Type H" was "Type S" APPROVED Sublocation: + AX3 CUSTOMER SIGNALS, CANBUS Document no. Rev. Ind Page 103 Next 104 3HAC026209-001 TYPE S Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04

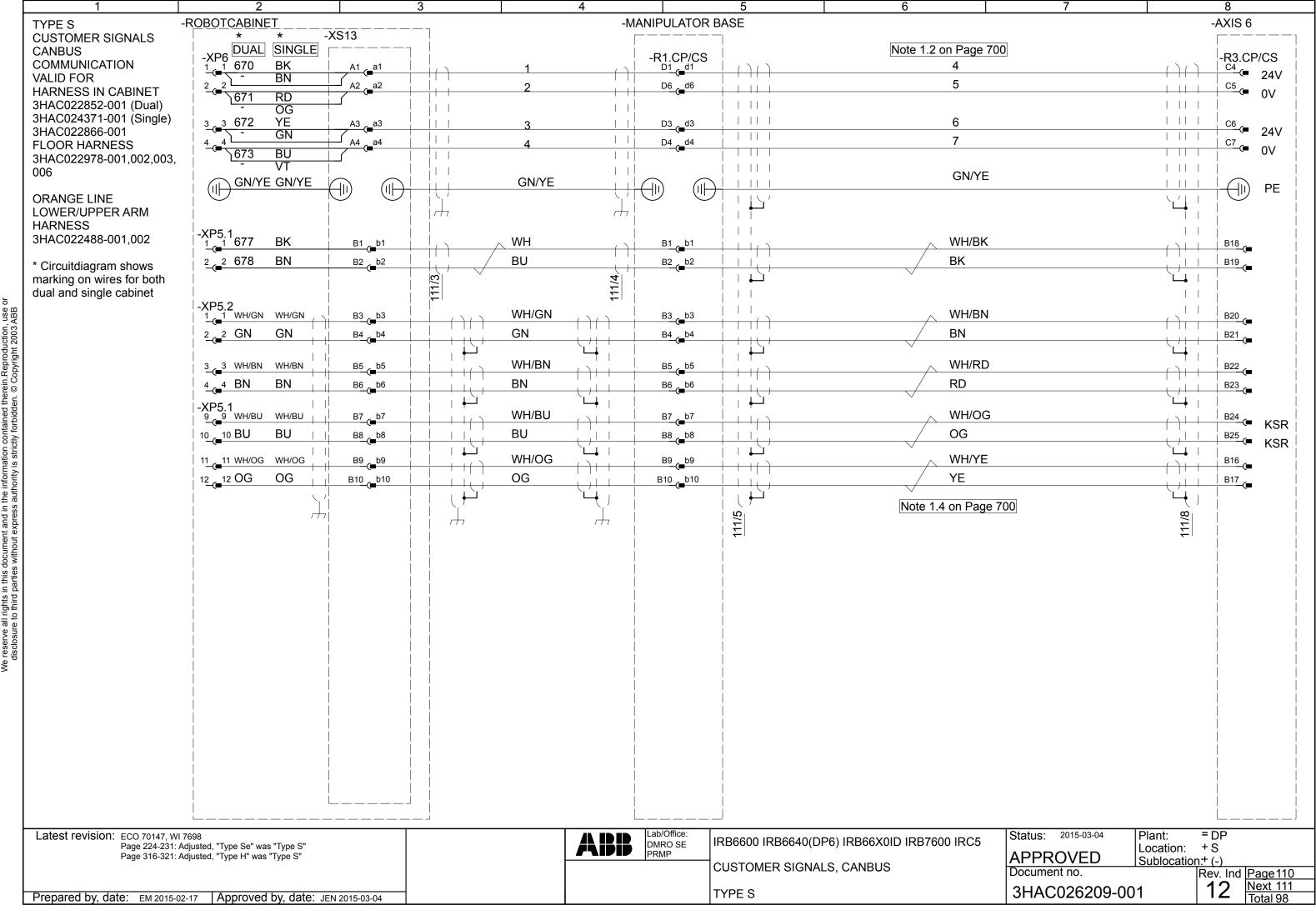
-ROBOTCABINET -MANIPULATOR BASE -AXIS 3 -AXIS 6 TYPE S 104/8 104/7 **CUSTOMER SIGNALS** -XS13 104/ SINGLE -R3.CP/CS DUAL -XP5.1 -R1.CP/CS -R2.CP/CS **ETHERNET** WH WH/GN <u>B1</u> (■ WH/GN 679 RD B11 \_\_b11 B11\_\_b11 COMMUNICATION OG GN <u>B2</u> (■ **VALID FOR** OG GN 680 B12 b12 B12\_b12 B12\_b12 HARNESS IN CABINET WH WH/BU <u>B3</u> (**■** YΕ WH/BU 681 B13 b13 B13\_b13 B13\_b13 3HAC022852-001 (Dual) GN BU <u>B4</u> (■ GN BU 682 B14 b14 B14 b14 B14\_b14 3HAC024371-001 (Single) | | 3HAC022867-001 -XP5.3 WH WH/VT FLOOR HARNESS 693 GY WH/VT B15\_\_b15 B15 \_\_b15 B15\_b15 B5\_\_\_ 3HAC023024-001,002,003, BN VT 694 WH VT B16 b16 B16\_b16 B16 b16 WH WH/GY WH/BK B18 b18 695 WH/GY <u>B7</u> (■ B18\_\_\_b18 B18\_\_b18 **ORANGE LINE** WH/BN B19 b19 GY GΥ GY 696 B19\_b19 B19\_\_\_b19 B8\_(**■** LOWER ARM HARNESS RD WH/BK WH/RD B20 b20 WH/BK <u>B9</u> (**■** 697 B20 b20 B20\_b20 3HAC034334-001 BU BK **UPPER ARM HARNESS** | | <sub>B10</sub> 1 1 WH/OG B21 b21 BK 698 B21\_\_b21 B21\_b21 3HAC023170-001,002 -XP5.2 | | B11 RD WH/OG 685 GΥ WH/OG C16 \_\_c16 C16\_\_c16 C16\_c16 FOR IRB66X0ID **CONNECTION BETWEEN** OG OG 686 WH OG C17 c17 C17\_c17 C17\_c17 B12 R2.CP/CS AND R3.CP/CS WH/BN WH/BK | C18 \_ c18 687 RD WH/BN | | B13 SEE PAGE IRB66X00ID C18\_c18 C18\_\_c18 LOWER ARM HARNESS -XP5.1 3HAC034334-001 GN ΒN BU 683 BN | | B14\_ | | C19\_c19 C19\_c19 C19\_c19 -XP5.2 Circuit diagram shows RD WH/RD WH/BN C20 c20 688 WH/RD B15 C20 c20 C20 c20 marking on wires for both dual and single cabinet -XP5.1 BN RD RD 684 VT C<u>8</u> C21 c21 C21\_c21 C21\_c21 -XP5.2 RD WH/YE WH/YE 1 1 689 WH/RD B22 \_ b22 B22\_\_b22 A1\_( B22 \_\_b22 690 WH/OG YΕ A2\_( GY YΕ 10\_\_\_10 B23 \_\_b23 B23 b23 B23 b23 BK <u>A3</u> 691 WH/YE B24 b24 WH/GN WH/GN 11\_\_\_11 B24 b24 B24 b24 WH/GN | B25 b25 BU GN GN 12 12 692 A4\_( B25 b25 B25 b25 -XP5.3 C12 666 WH/BU WH/VT C13 10\_\_\_10 667 WH/GY C14 11\_\_\_11 668 <u>C15</u> 12 12 669 BN/BK C10 699 WH/YE WH/GN | C11 700 Lab/Office Status: 2015-03-04 = DP Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" Location: + S Page 316-321: Adjusted, "Type H" was "Type S" APPROVED Sublocation: + AX3 **CUSTOMER SIGNALS, ETHERNET** Document no. Rev. Ind Page 105 Next 106 3HAC026209-001 TYPE S Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04

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-ROBOTCABINET -MANIPULATOR BASE -AXIS 3 -AXIS 6 TYPE S -XS13 **CUSTOMER SIGNALS** 106/3 106/4 **PROFIBUS** COMMUNICATION DUAL SINGLE -R1.CP/CS -R2.CP/CS -R3.CP/CS **VALID FOR** -XP5.1 <u>B1</u> (■ 679 RD WH WH/GN WH/GN B11\_\_B11 B11\_c11 B11\_\_b11 HARNESS IN CABINET B2\_\_\_\_ 680 OG OG B12 \_ B12 GN GN 3HAC022852-001 (Dual) B12\_b12 B12\_b12 3HAC024371-001 (Single) <u>B3</u> (■ WH WH/BU 681 YE B13 \_ B13 B13 \_ b13 B13\_b13 WH/BU 3HAC022868-001 <u>B4</u> (■ 682 GN GN BU BU B14 \_ B14 B14\_b14 B14 b14 **FLOOR HARNESS** 3HAC022988-001,002,003,006 -XP5.3 693 GY WH WH/VT WH/VT B15 \_\_B15 B15 \_\_b15 B15\_b15 B5\_\_ **ORANGE LINE** VT VT 694 WH BN <u>B6</u> B16 \_\_B16 B16\_b16 B16\_b16 LOWER ARM HARNESS 695 WH/BK WH WH/GY WH/GY B7\_**(**■ 3HAC022480-001 B18 \_\_B18 B18 \_\_b18 B18 \_\_b18 **UPPER ARM HARNESS** B8\_\_ 696 WH/BN GY GΥ GY B19 B19 B19\_b19 B19\_b19 3HAC023172-001,002 1 1 <u>B9</u> 697 WH/RD RD WH/BK WH/BK B20 B20 B20 b20 B20 b20 B10 SILVER LINE 698 WH/OG BU BK BK B21 B21 B21\_\_b21 B21\_\_\_b21 LOWER ARM HARNESS -XP5<u>.</u>2 3HAC022470-001 685 GY RD WH/OG WH/OG B11 C16\_C16 C16\_c16 C16\_c16 3HAC022471-001 **UPPER ARM HARNESS** | | B12 OG OG OG 686 WH C17\_C17 C17\_c17 C17\_c17 3HAC022476-001 RD WH/BN WH/BN B13\_ 687 WH/BK C18 \_ C18 C18\_c18 C18\_c18 3HAC022476-002 3HAC022476-003 -XP5.1 B14 683 BU GN BN BN C19 \_ C19 C19\_\_c19 C19\_c19 FOR IRB66x0ID -XP5.2 **CONNECTION BETWEEN** RD WH/RD 688 WH/BN C20\_c20 WH/RD C20\_c20 C20 \_\_C20 B15 R2.CP/CS AND R3.CP/CS SEE PAGE IRB66x0ID -XP5.1 <u>C8</u> 684 VT BN RD RD C21\_c21 C21\_c21 LOWER ARM HARNESS C21\_\_C21 3HAC022480-001 -1**UPPER ARM HARNESS** -XP5.2 689 WH/RD <u>A1</u> RD WH/BK WH/BK B22 b22 B22 b22 B22 \_\_b22 3HAC025532-001 10\_\_10 690 WH/OG GY BK BK B23 \_\_b23 B23 \_b23 B23\_b23 A2\_( Circuitdiagram shows marking | | | A3 691 WH/YE BK WH/BN WH/BN B24 b24 B24 \_\_b24 B24\_\_b24 on wires for both dual and single cabinet 12 12 692 WH/GN BU BN ΒN B25 \_\_b25 B25\_b25 B25 b25 -XP5.3 | | | A7\_( 699 WH/YE BK YΕ YΕ C10\_\_c10 A3\_\_a3 A3\_\_a3 | | OG 6 YΕ YΕ <u>A8</u> 700 WH/GN 6 C11 \_\_c11 A4\_\_a4 A4\_(=a4 -DP-M <u>A9</u> (■ RD RD F5\_\_f5 RD VT VT A5\_\_a5 A5\_\_a5 RXD/TXD-P GN GN GN 8 VT 8 VT A10 F6\_\_f6 1A 1A A6\_\_a6 RXD/TXD-N -XP5.3 666 WH/BU BK GN GN c12\_c12 A9 \_\_a9 A9 \_\_a9 2 GN GN GN 667 WH/VT A6\_( C13 \_\_c13 A10\_a10 A10\_a10 668 WH/GY BK 3 GN 3 GN 11\_\_\_11 C14\_c14 | A11\_ A11\_\_a11 A11\_\_a11 | A12 669 BN/BK BN GN GN 12 12 C15 \_ c15 A12\_a12 A12\_a12 Lab/Office = DP 2015-03-04 Status: Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" + S Location: Page 316-321: Adjusted, "Type H" was "Type S" APPROVED Sublocation: + AX3 CUSTOMER SIGNALS, PROFIBUS Document no. Rev. Ind Page 107 Next +.(-)/10 3HAC026209-001 TYPE S Prepared by, date: EM 2015-02-17 | Approved by, date: JEN 2015-03-04

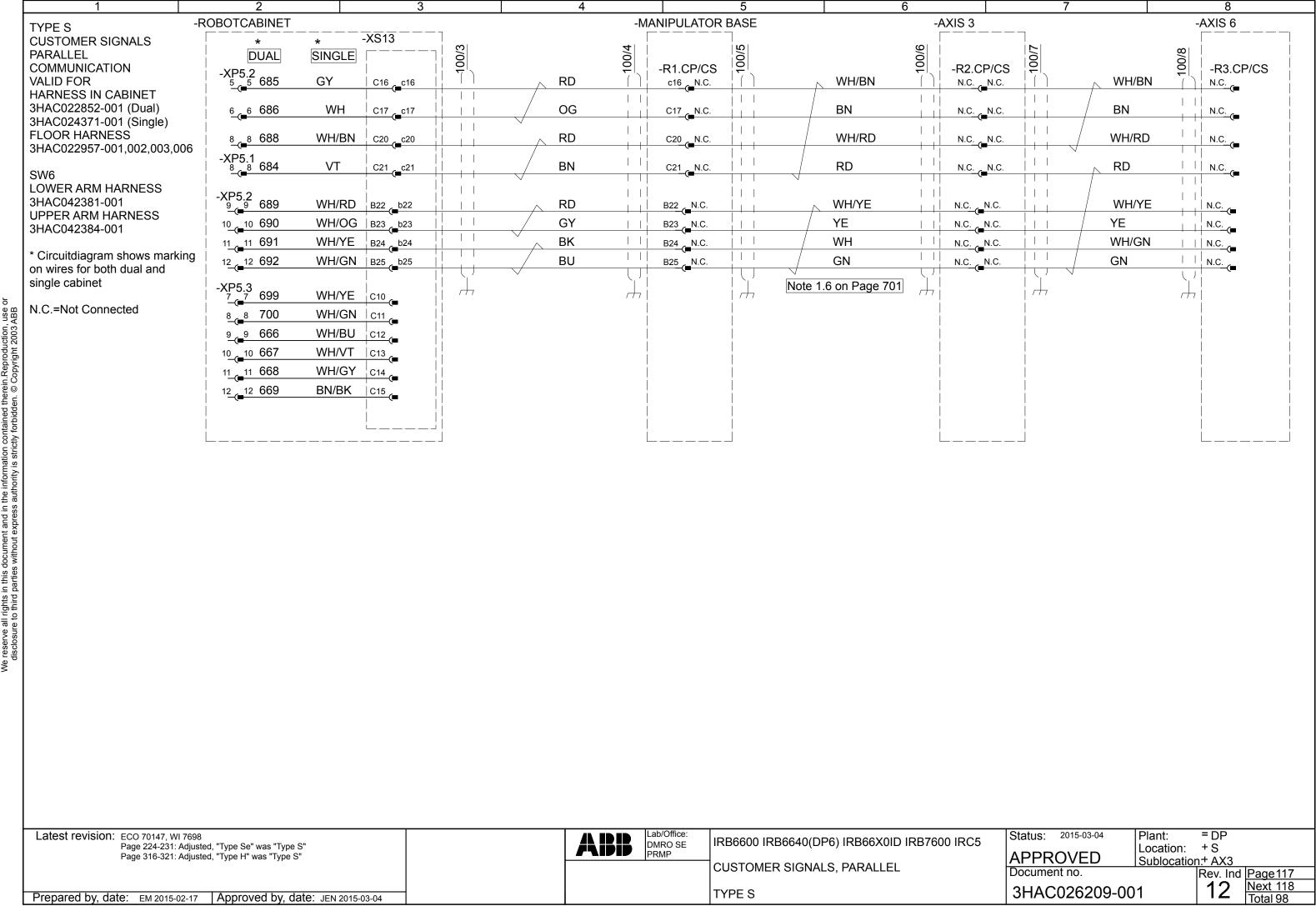


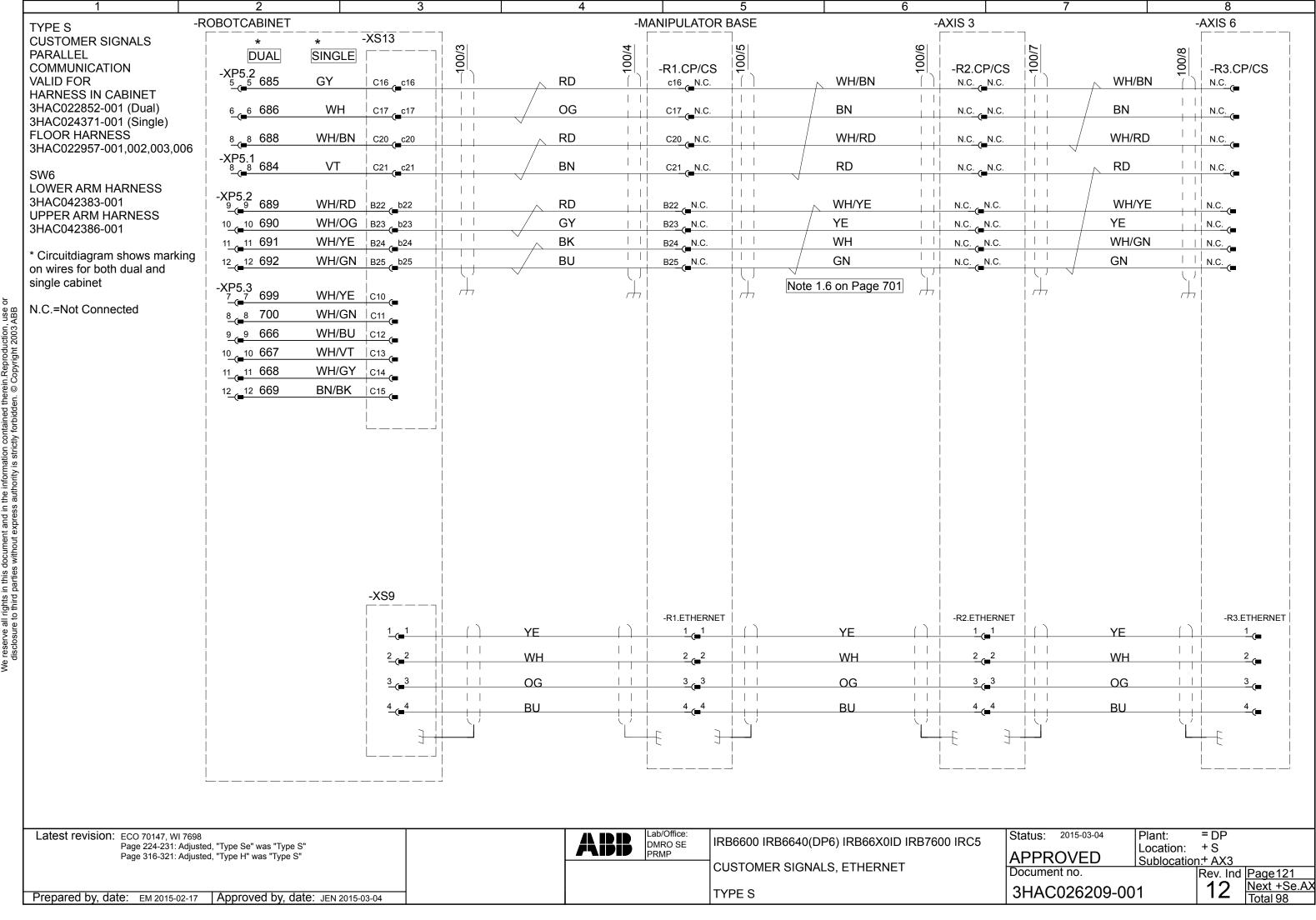


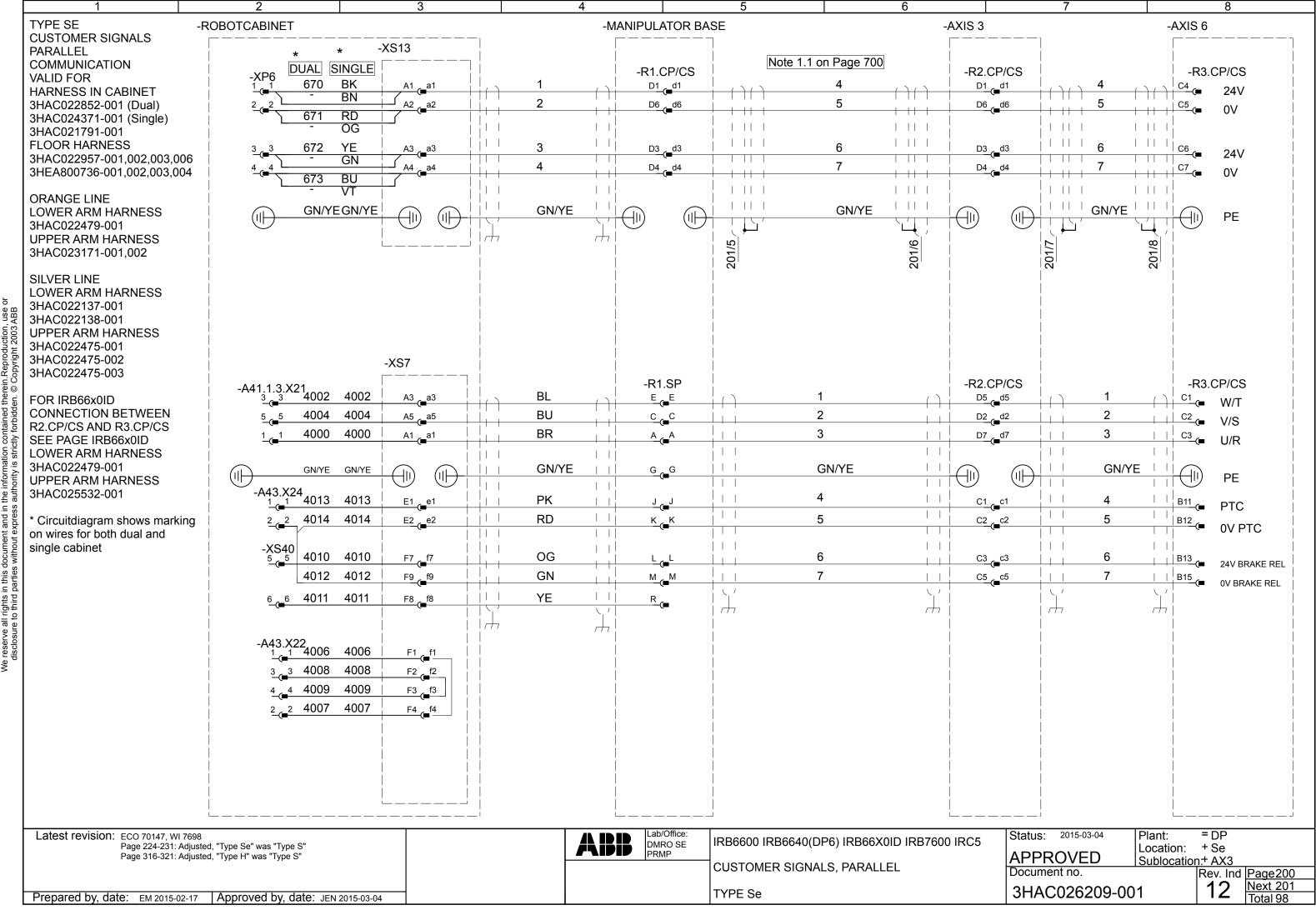
6 -ROBOTCABINET -MANIPULATOR BASE -AXIS 6 TYPE S ŠINGLE -XS13 **CUSTOMER SIGNALS** DUAL -R1.CP/CS -R3.CP/CS -XP5. **CANBUS** WH/GN 679 RD WH B11 \_\_b11 B11\_\_b11 B1\_( COMMUNICATION 4 680 **VALID FOR** OG OG GN B12 b12 B12\_b12 HARNESS IN CABINET <u>5 681</u> <u>B3</u> (**■** YΕ WH WH/BU B13 b13 B13 b13 3HAC022852-001 (Dual) 6 682 <u>B4</u>(**■** B14\_b14 BU GN GN 3HAC024371-001 (Single) B14 b14 -XP5.3<sub>693</sub> 3HAC022866-001 B5\_\_\_ WH/VT GΥ WH FLOOR HARNESS B15\_b15 B15 b15 3HAC022978-001,002,003,006 2 694 VTWH BN B16\_b16 B16\_\_b16 3 695 WH WH/BK WH/GY B18 b18 **ORANGE LINE** B18 b18 4 696 LOWER/UPPER ARM HARNESS WH/BN GY GY B19 b19 B19\_\_b19 3HAC022488-001,002 <u>5</u> 697 WH/RD RD WH/BK B20 b20 B20\_b20 6 698 <u>6 698</u> | | B10 \* Circuitdiagram shows marking WH/OG BU BK B21 b21 B21 b21 on wires for both dual and -XP5.2 5 685 single cabinet WH/OG GΥ RD| B11 (■ C16\_c16 C16 \_ c16 6 686 <u>6 686</u> | | B12 WH OG C17 c17 C17\_c17 OG | | B13 \_7 687 WH/BK RD WH/BN C18 \_ c18 C18 \_\_c18 -XP5<u>.</u>1 | | B14 BU GN BN683 ' C19\_c19 C19\_c19 -XP5.2 8\_8 688 B15 WH/BN RD WH/RD C20 c20 C20\_c20 -XP5.1 8\_\_8 684 <u>C8</u> VT BN RD C21 c21 C21\_c21 -A35.X2 5\_\_5 RD (■ +24V CAN RD RDWH/BK F1\_f1 B22 b22 <u>1</u> \_ 1 BK A2 OV CAN BK BK BK B23\_b23 F2\_f2 -XP5.2 11\_691 A3\_(= BK WH/YE B24 b24 WH/BN B24\_b24 12 692 BU WH/GN BN A4 B25 b25 B25\_b25 9 689 WH/RD B22 10 690 <u>B23</u> (■ WH/OG -A35.X2 4\_4 WH 5 YE WH A7 CAN\_H WH F3\_f3 A3 a3 6 YΕ 2 BU A8 CAN\_L BU BU F4\_\_\_f4 -XP5,3 699 WH/YE BK VT C10 c10 1 | A10 8 VT <u>8</u>8 700 OG WH/GN C11 \_\_c11 A6\_\_a6 GN BK <u>A5</u>(■ 9 666 WH/BU C12 c12 A9\_\_a9 2 <u>A6</u> GN 10 667 GN WH/VT A10\_a10 C13 c13 | | | A11 3 GN 11 668 BK WH/GY C14 c14 A11\_a11 GN 4 12 669 BN/BK BN C15\_c15 A12\_a12 A12 Lab/Office Status: 2015-03-04 = DP Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" + S Location: Page 316-321: Adjusted, "Type H" was "Type S" **APPROVED** Sublocation: (-) CUSTOMER SIGNALS, CANBUS Document no. Rev. Ind Page 111 Next 114 3HAC026209-001 TYPE S Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04

6 -ROBOTCABINET TYPE S -MANIPULATOR BASE -AXIS 6 **CUSTOMER SIGNALS** -XS13 **PROFIBUS** DUAL SINGLE COMMUNICATION Note 1.2 on Page 700 -R1.CP/CS -R3.CP/CS **VALID FOR** BK D1\_d1 HARNESS IN CABINET 24V BN C5\_( A2 (=a2 3HAC022852-001 (Dual) 2 D6\_\_d6 0V 3HAC024371-001 (Single) 671 1 11 1 1 11 1 OG 3HAC022868-001 FLOOR HARNESS 1 11 1 1 11 1 3 672 YΕ 3 D3 d3 6 3HAC022988-001,002,003,006 24V GN 4 A4 D4\_d4 0V BU **ORANGE LINE** ՝ 673 1 11 1 VT LOWER/UPPER ARM HARNESS 3HAC022488-001,002 **GN/YE GN/YE** GN/YE GN/YE PΕ \* Circuitdiagram shows marking on wires for both dual and WH/BK BK WH B18 <sup>'</sup> 677 B1 \_b1 single cabinet 2 678 BU B2 b2 BK BN B2 b2 B19 115/4 We reserve all rights in this document and in the information contained therein Reproduction, use disclosure to third parties without express authority is strictly forbidden. © Copyright 2003 ABB WH/GN WH/BN WH/GN B20 B3 b3 B3 b3 B21\_ 2 GN BN GN B4 \_\_b4 GN WH/RD WH/BN 3 WH/BN WH/BN B5 b5 B22 4 BN RDBN BN B23\_( `— -XP5.1 9\_0 WH/BU B24 WH/BU WH/OG B7 \_\_b7 WH/BU B7\_\_b7 **KSR** 10 BU BU BU OG B8 \_\_b8 B8 \_\_b8 B25 **KSR** `**—** 11\_\_\_\_11\_WH/OG WH/OG WH/YE B16\_( WH/OG B9 b9 B9\_\_\_b9 OG YΕ 12 OG OG B10 b10 B10 b10 B17\_( `**—** Note 1.4 on Page 700 + $\mathcal{H}$ Lab/Office Status: 2015-03-04 = DP Latest revision: ECO 70147, WI 7698 Plant: IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" + S Location: Page 316-321: Adjusted, "Type H" was "Type S" **APPROVED** Sublocation: (-) CUSTOMER SIGNALS, PROFIBUS Document no. Rev. Ind Page 114 Next 115 3HAC026209-001 TYPE S Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04

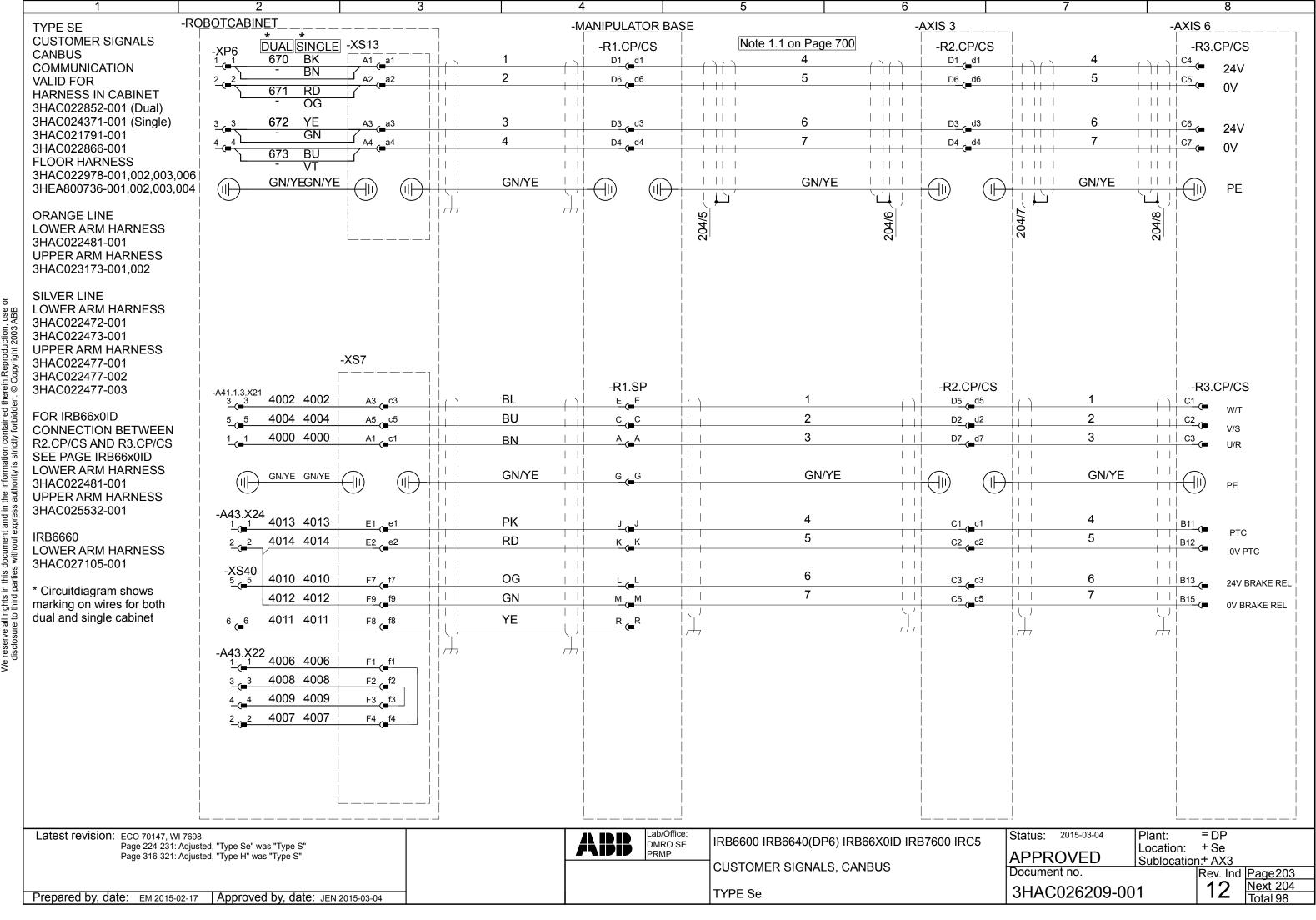
6 -ROBOTCABINET -MANIPULATOR BASE -AXIS 6 TYPE S -XS13 **CUSTOMER SIGNALS PROFIBUS** COMMUNICATION DUAL SINGLE R1.CP/CS -R3.CP/CS **VALID FOR** <u>B1</u> (■ 679 RD WH WH/GN B11 \_\_b11 B11\_\_b11 HARNESS IN CABINET B2\_( OG GN 680 OG B12 \_\_b12 3HAC022852-001 (Dual) B12\_b12 3HAC024371-001 (Single) B3 (= WH 681 YE B13 b13 B13\_b13 WH/BU 3HAC022868-001 <u>B4</u>(■ 682 GN GN BU B14 b14 B14\_b14 **FLOOR HARNESS** 3HAC022988-001,002,003,006 -XP5.3 693 GY WH WH/VT B15\_b15 B15\_b15 B5\_\_ **ORANGE LINE** | | B6 VT 694 WH BN B16 \_\_b16 B16\_\_b16 LOWER/UPPER ARM HARNESS B<u>7</u>(■ 695 WH/BK WH WH/GY 3HAC022488-001,002 B18 \_\_b18 B18\_\_b18 B8\_\_\_ 696 WH/BN GY GY B19\_b19 B19\_b19 \* Circuitdiagram shows marking 697 WH/RD RD WH/BK B20 b20 B20 b20 B9\_( on wires for both dual and single cabinet B10 698 WH/OG BU BK B21 b21 B21\_\_b21 -XP5.2 685 GY RD WH/OG B<u>11</u> C16\_c16 C16\_c16 OG OG 686 WH C17\_c17 C17\_c17 B12 RD 687 WH/BK C18 c18 C18 \_ c18 WH/BN B13 B14\_ 683 BU GN BN C19\_c19 C19\_c19 688 WH/BN RD C20\_c20 WH/RD C20 c20 B15\_( -XP5.1 <u>C8</u> 684 VT BN RD C21\_c21 C21 c21 -XP5.2 WH/BK <u>A1</u> 689 WH/RD RD B22 b22 B22 b22 <u>A2</u> 690 WH/OG 10\_\_\_10 GY BK B23 \_\_b23 B23\_b23 - | | A3 BK 691 WH/YE WH/BN B24 b24 B24\_b24 12 12 692 WH/GN BU BN B25 b25 B25 b25 -XP5.3 5 YΕ <u>A7</u> 699 WH/YE BK C10\_c10 A3\_\_a3 YΕ OG 6 <u>A8</u> 700 WH/GN C11 c11 A4 \_\_a4 -DP-M 1B\_\_1B VT RD RD F5\_\_f5 RD A5\_\_a5 A9 RXD/TXD-P GN GN GN 8 VT F6\_\_f6 A6\_\_a6 RXD/TXD-N -XP5.3 666 WH/BU BK GN c12\_c12 A9 \_\_a9 A5\_ 2 GN 10\_\_\_10 GN 667 WH/VT C13 c13 A10\_a10 668 WH/GY BK 3 GN | | A11 11\_\_\_11 C14 c14 A11\_\_a11 | | A12 12 12 669 BN/BK BN 4 GN C15 c15 A12 a12 Status: 2015-03-04 = DP Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" + S Location: Page 316-321: Adjusted, "Type H" was "Type S" **APPROVED** Sublocation: (-) CUSTOMER SIGNALS, PARALLEL Document no. Rev. Ind Page 115 Next +.AX3/ 3HAC026209-001 TYPE S Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04

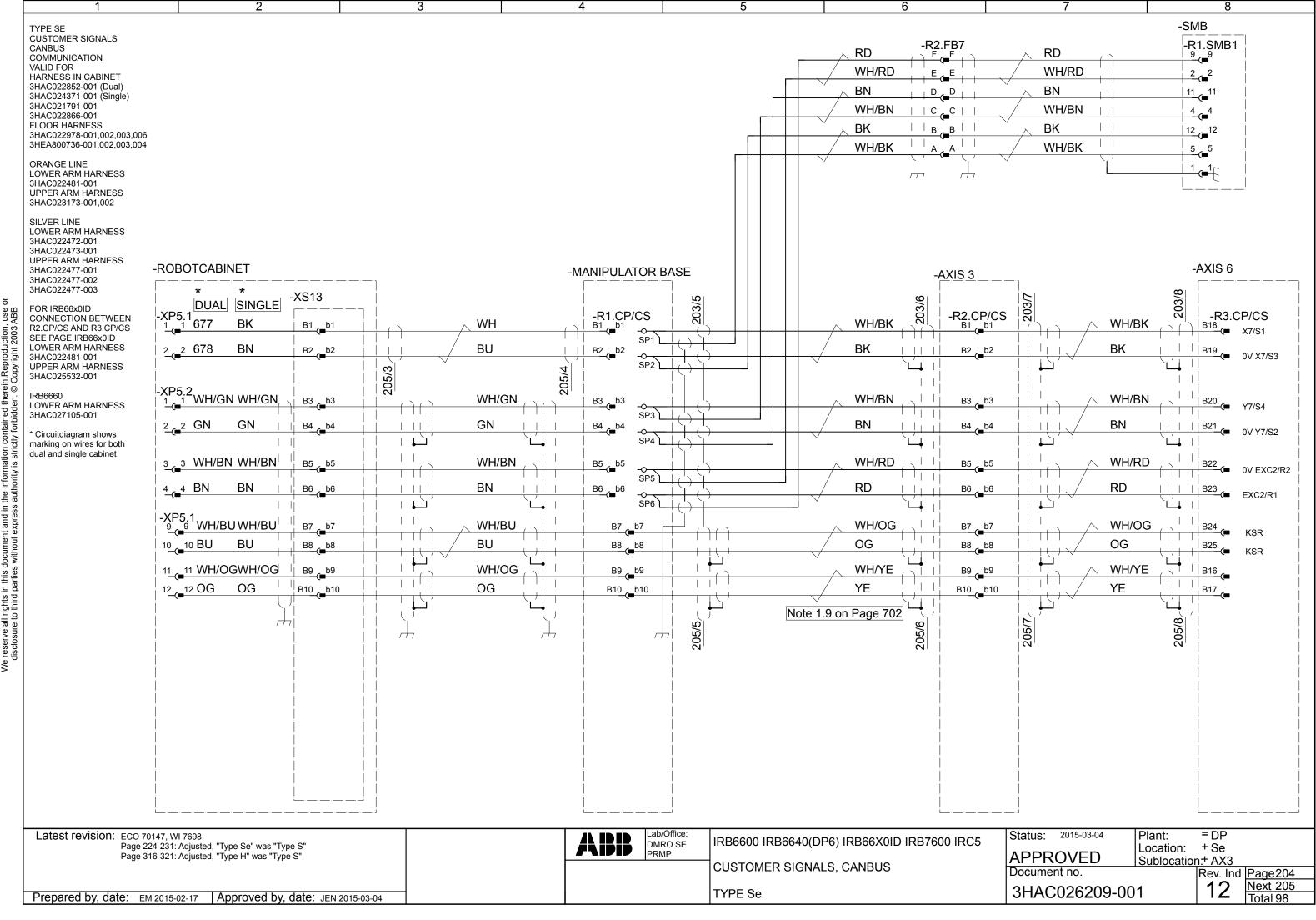


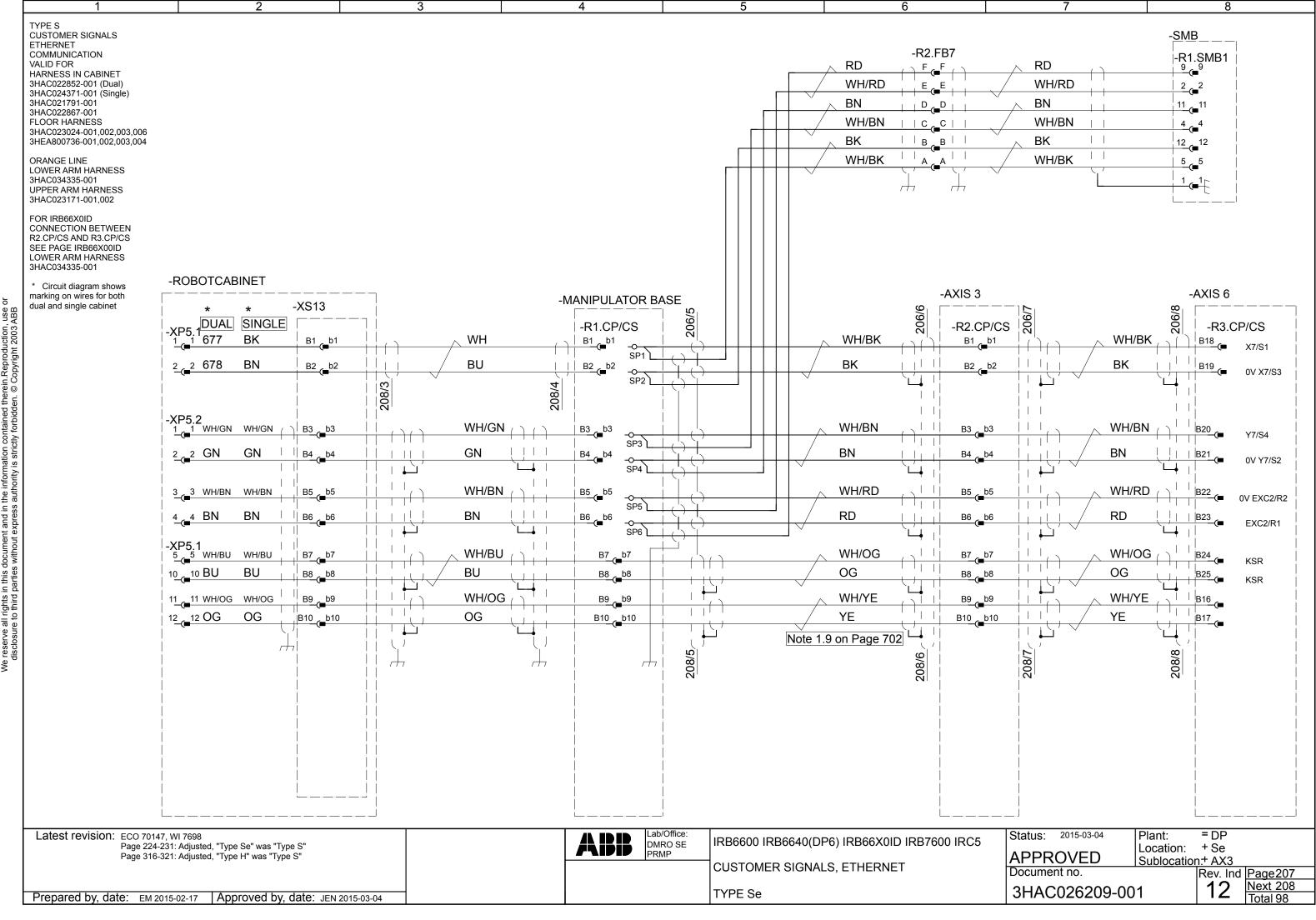




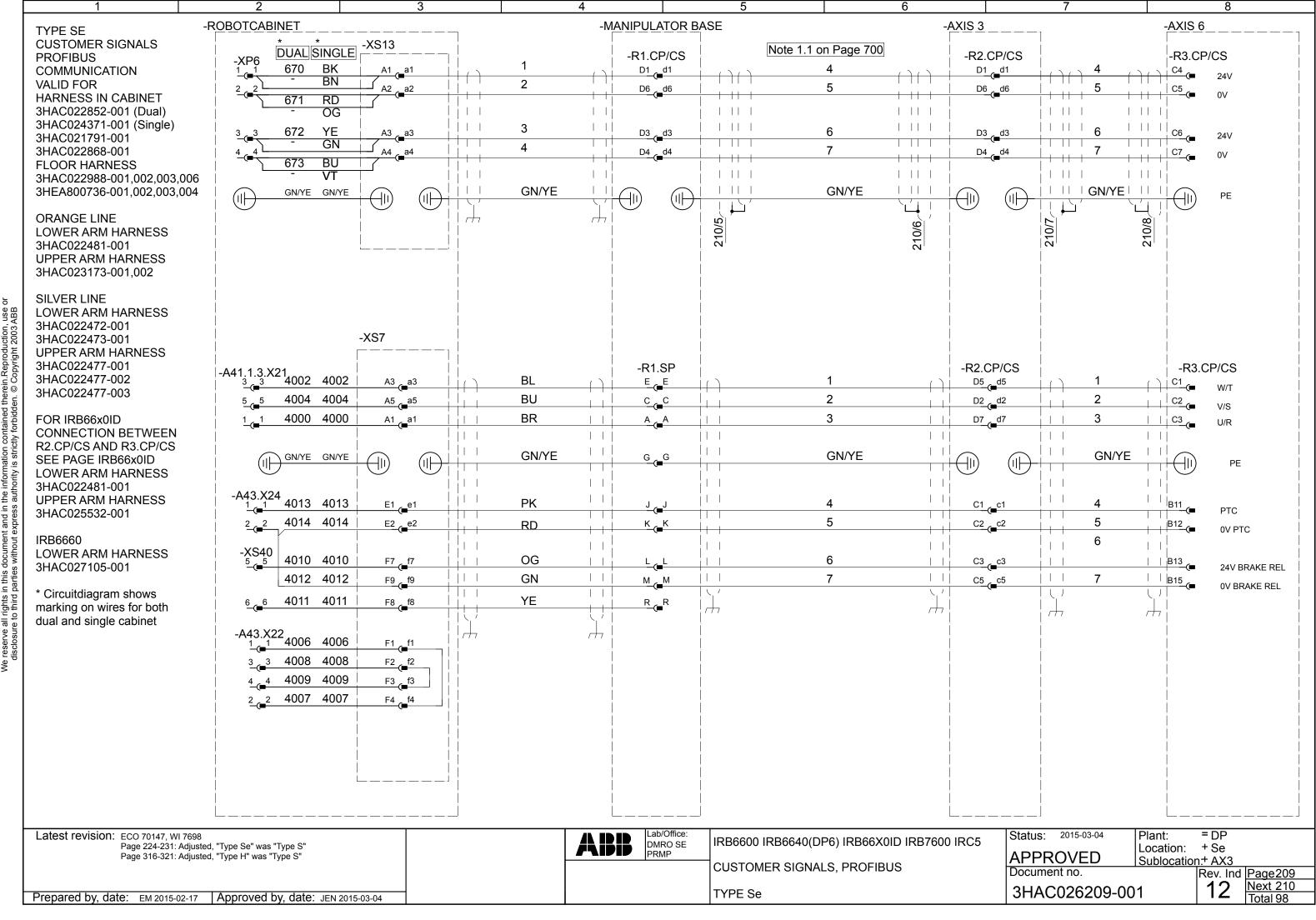
-ROBOTCABINET -MANIPULATOR BASE -AXIS 3 -AXIS 6 TYPE SE **CUSTOMER SIGNALS** -XS13 PARALLEL 201/7 201/6 201/4 201/3 COMMUNICATION DUAL SINGLE 201/ -R3.CP/CS -R1.CP/CS -R2.CP/CS **VALID FOR** -XP5.1 RD WH WH/GN WH/GN 679 B11 \_ b11 B11\_\_b11 B11\_\_b11 B1\_ HARNESS IN CABINET B2\_( 3HAC022852-001 (Dual) OG 680 OG GN GN b12\_b12 B12\_b12 1 1 B12\_b12 3HAC024371-001 (Single)  $| \cdot |$ B3\_( 1 1 WH WH/BU WH/BU 681 YΕ B13 b13 B13 \_b13 B13\_b13 3HAC021791-001 -1| | <u>B4</u> (■ 682 GN GN BU BU **FLOOR HARNESS** B14\_\_b14 B14 b14 B14\_b14 3HAC022957-001,002,003,006 3HEA800736-001,002,003,004  $\perp$ B5\_\_\_ GY WH WH/VT WH/VT 693 B15 b15 B15\_b15 B15\_b15 <u>B6</u> (■ BN VT VT 694 WH B16 \_\_b16 B16\_b16 B16\_b16 ORANGE LINE LOWER ARM HARNESS <u>B7</u> (**■** WH WH/GY WH/GY WH/BK 695 B18\_\_b18 B18\_\_b18 B18\_b18 3HAC022479-001 GY GY <u>B8</u> (**■** GY 696 WH/BN B19\_b19 B19\_\_b19 B19\_b19 **UPPER ARM HARNESS** 1 1 1.1 1 1 1 1 <u>B9</u> **(**■ RD WH/BK WH/BK 3HAC023171-001,002 697 WH/RD B20 b20 B20 b20 B20\_\_b20  $\perp$ BU BK BK B10\_ 698 WH/OG B21 \_\_b21 B21\_b21 B21\_b21 SILVER LINE Note 1.10 on Page 702 LOWER ARM HARNESS RD 685 GY WH/OG C16\_c16 C16\_c16 C16 3HAC022137-001  $\perp$ 3HAC022138-001 OG OG C17\_( 686 WH C17 c17 C17\_c17 **UPPER ARM HARNESS** RD C18 WH/BN 687 WH/BK C18 c18 C18 \_ c18 3HAC022475-001 3HAC022475-002  $\perp$ GN BN BN 683 BU 3HAC022475-003 C19\_c19 C19\_c19 C19\_c19 B14\_ 1 1 1 1 RD WH/RD FOR IRB66x0ID 688 WH/BN C20 \_ c20 C20 \_\_c20 C20 **CONNECTION BETWEEN** -XP5,1 1 1 R2.CP/CS AND R3.CP/CS 684 BN RD RDC8\_( C21\_c21 C21\_c21 SEE PAGE IRB66x0ID LOWER ARM HARNESS <u>A1</u> RD WH/YE 689 WH/RD WH/YE B22 \_ b22 B22\_b22 B22\_b22 3HAC022479-001 <u>A2</u> 10 690 WH/OG GY YΕ YΕ B23 \_ b23 B23 b23 B23 b23 **UPPER ARM HARNESS** 3HAC025532-001 11 691 WH/YE BK B24\_b24 WH/GN WH/GN B24\_\_b24 B24\_b24 A3\_ 12 12 692 WH/GN BU GN GN B25 \_\_b25 B25 b25 B25\_b25 \* Circuitdiagram shows marking on wires for both dual and single cabinet +699 WH/YE C10\_ 8 700 WH/GN C11\_(= 9 666 WH/BU C12 10 667 WH/VT C13 11\_\_\_11 668 C14 WH/GY 12 12 669 BN/BK C15 Status: 2015-03-04 Lab/Office = DP Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" Location: + Se Page 316-321: Adjusted, "Type H" was "Type S" **APPROVED** Sublocation: + AX3 CUSTOMER SIGNALS, PARALLEL Document no. Rev. Ind Page 202 Next 203 3HAC026209-001 TYPE Se Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04

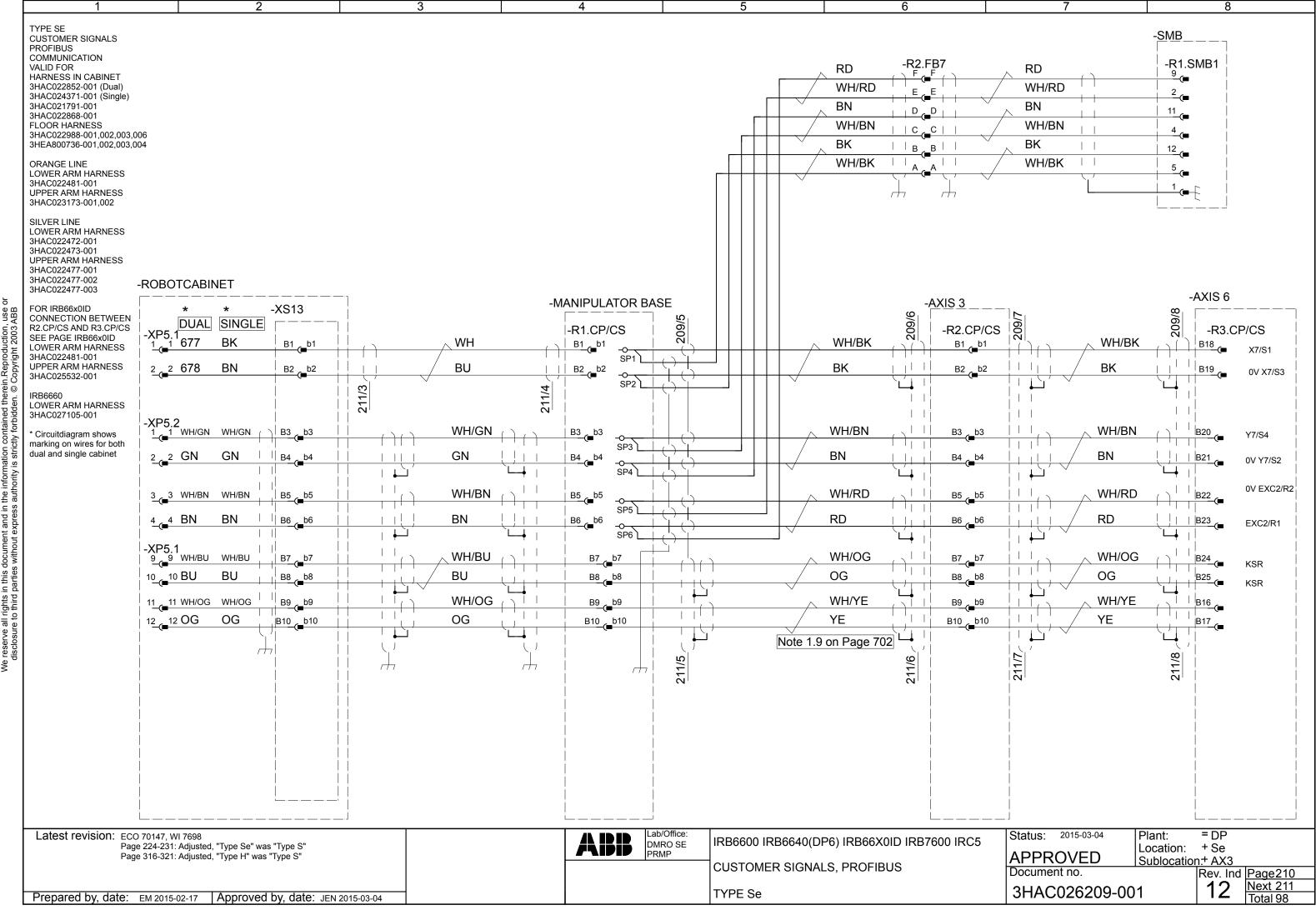




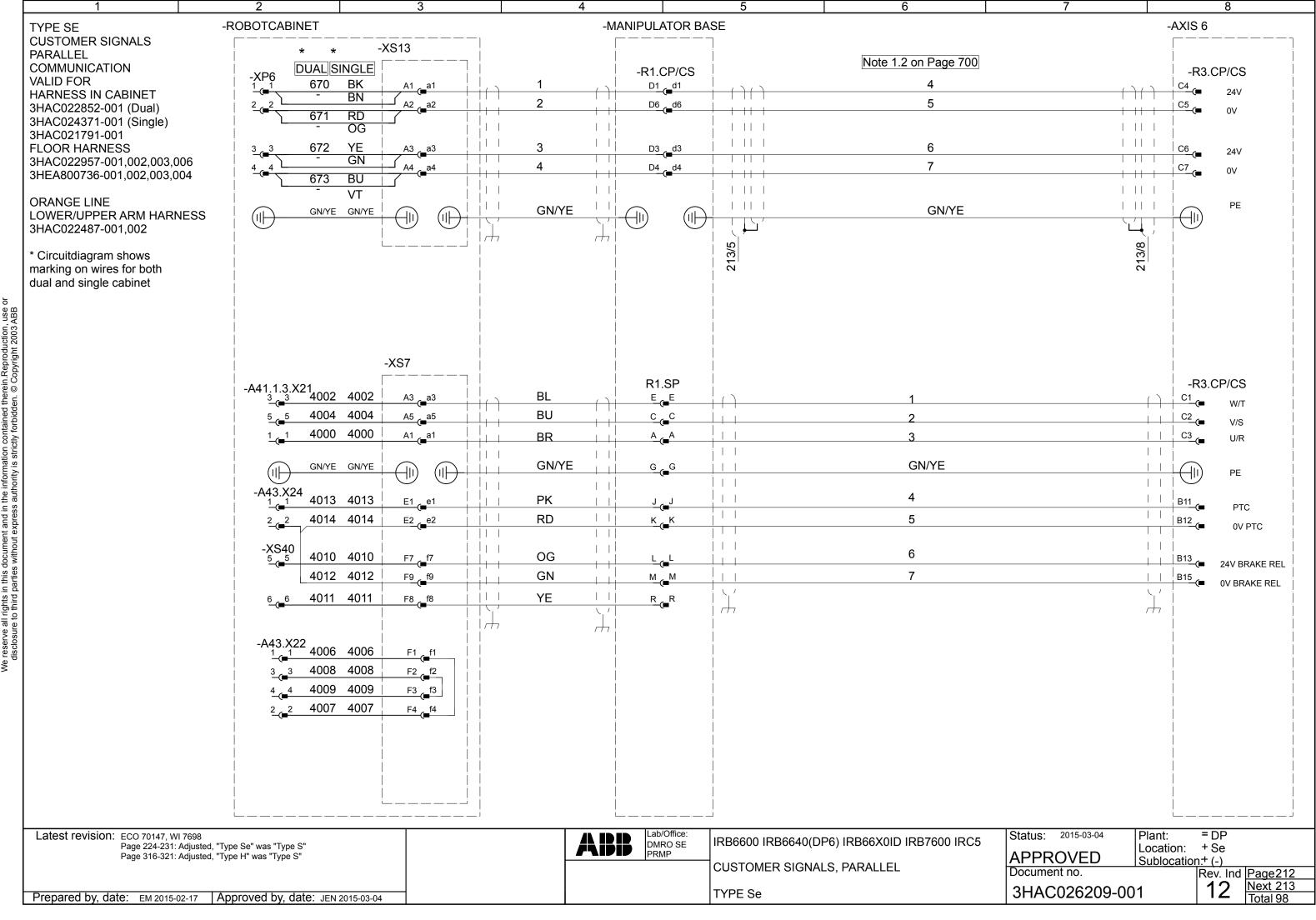


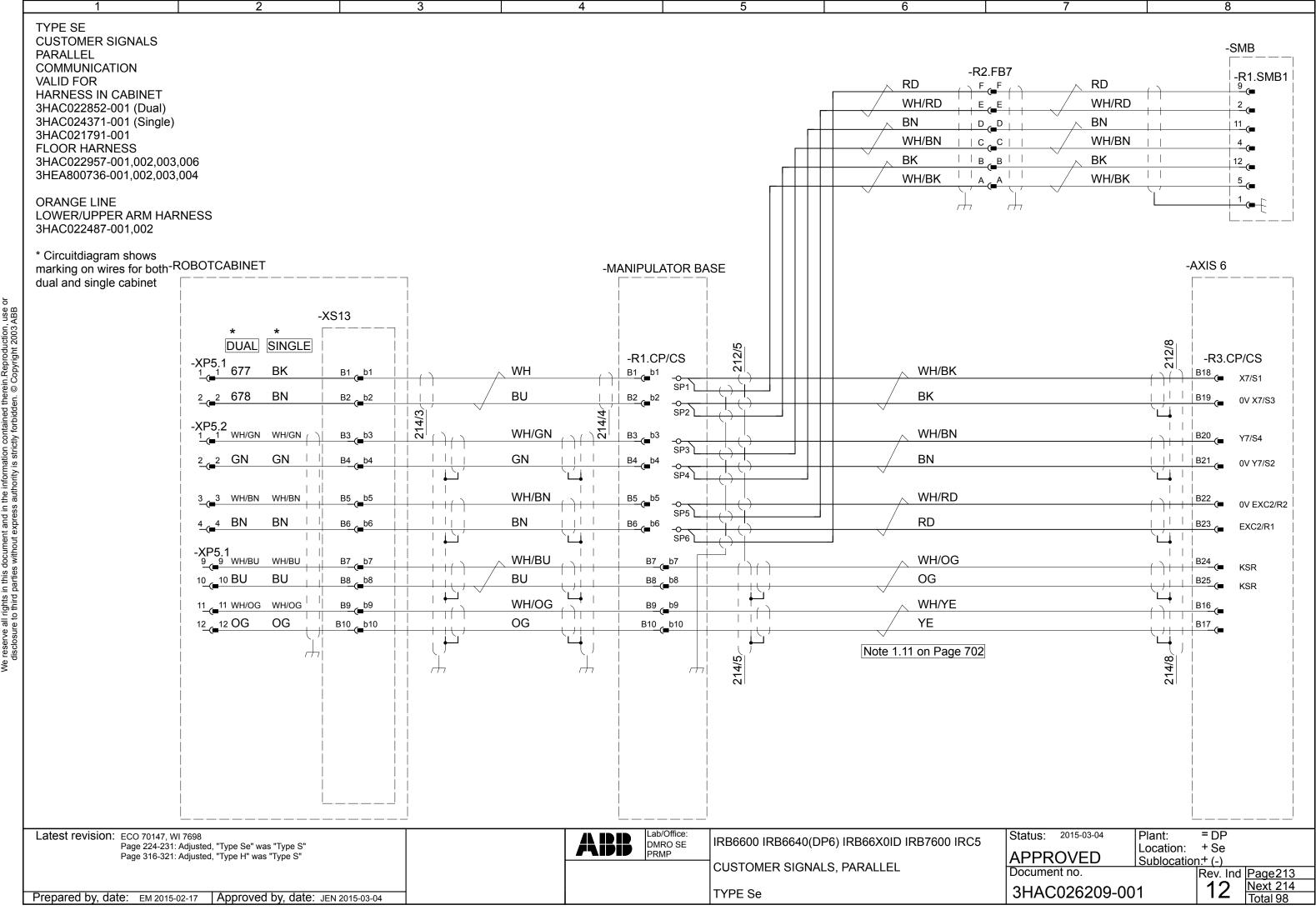
TYPE S -ROBOTCABINET -MANIPULATOR BASE -AXIS 3 -AXIS 6 **CUSTOMER SIGNALS** 207/3 -XS13 207/4 207/6 207/8 **ETHERNET** DUAL SINGLE COMMUNICATION -R2.CP/CS -R3.CP/CS -R1.CP/CS -XP5.1 <u>B1</u> (■ **VALID FOR** RD WH WH/GN WH/GN 679 B11 \_ b11 B11 \_ b11 B11 \_ b11 HARNESS IN CABINET OG <u>B2</u>(■ 680 OG GN GN B12 b12 B12\_b12 B12\_b12 3HAC022852-001 (Dual) <u>B3</u> (■ YΕ WH WH/BU 681 WH/BU B13 \_\_b13 B13\_b13 B13\_b13 3HAC024371-001 (Single) 3HAC021791-001 1 1 GN GN BU BU 682 B4\_( B14 \_ b14 B14 b14 B14\_b14 3HAC022867-001 **FLOOR HARNESS** -XP5.3 693 GΥ WH WH/VT WH/VT B15\_b15 B15\_b15 B15\_b15 B5\_\_ 3HAC023024-001,002,003,006 VT3HEA800736-001,002,003,004 694 WH BN VT b16\_\_b16 B16\_b16 B16\_\_b16 1 1 695 WH/BK | B18 \_\_b18 WH WH/GY WH/GY B18\_\_b18 B18\_\_b18 **ORANGE LINE** B8\_**(**■ WH/BN B19\_b19 GY GY GY 696 LOWER ARM HARNESS B19\_\_b19 B19\_b19 3HAC034335-001 697 WH/RD B20 b20 RD WH/BK WH/BK B9\_( B20 b20 B20 b20 **UPPER ARM HARNESS** B10 WH/OG B21 b21 698 BU BK BK B21\_b21 B21\_b21 3HAC023171-001,002 -XP5.2 FOR IRB66X0ID RD WH/OG WH/OG 685 GΥ C16\_\_c16 C16\_c16 C16\_c16 **CONNECTION BETWEEN** 686 OG OG OG WH C17\_c17 C17\_c17 R2.CP/CS AND R3.CP/CS C17\_c17 SEE PAGE IRB66X00ID RD687 WH/BK | C18 \_ c18 WH/BN WH/BN C18\_c18 C18\_c18 **LOWER ARM HARNESS** 1 1 3HAC034335-001 683 BU GN ΒN ΒN B14 C19\_c19 C19\_c19 C19\_c19 Circuit diagram shows -XP5.2 WH/BN | C20 \_ c20 RD WH/RD WH/RD marking on wires for both 688 C20 c20 C20 c20 dual and single cabinet -XP5.1 684 BN RD RD <u>C8</u> VT C21 c21 C21\_c21 C21\_c21 -XP5,2 WH/RD | B22 b22 WH/YE 689 RD WH/BK B22 \_\_b22 B22 \_\_b22 <u>A2</u> WH/OG B23 b23 GY YΕ 10\_\_\_10 690 BK B23 \_b23 B23 b23 WH/YE | B24 b24 <u>A3</u> BK 691 B24 b24 WH/GN WH/GN B24 b24 WH/GN B25 b25 BU GN GN 692 A4\_\_ B25 b25 B25 b25 -XP5.3 WH/BU C12 666 WH/VT | C13 WH/GY C14 668 BN/BK C15 12 12 669 WH/YE C10 699 WH/GN c<sub>11</sub> 700 Lab/Office Status: 2015-03-04 = DP Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" + Se Location: Page 316-321: Adjusted, "Type H" was "Type S" **APPROVED** Sublocation: + AX3 **CUSTOMER SIGNALS, ETHERNET** Document no. Rev. Ind Page 208 Next 209 3HAC026209-001 TYPE Se Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04



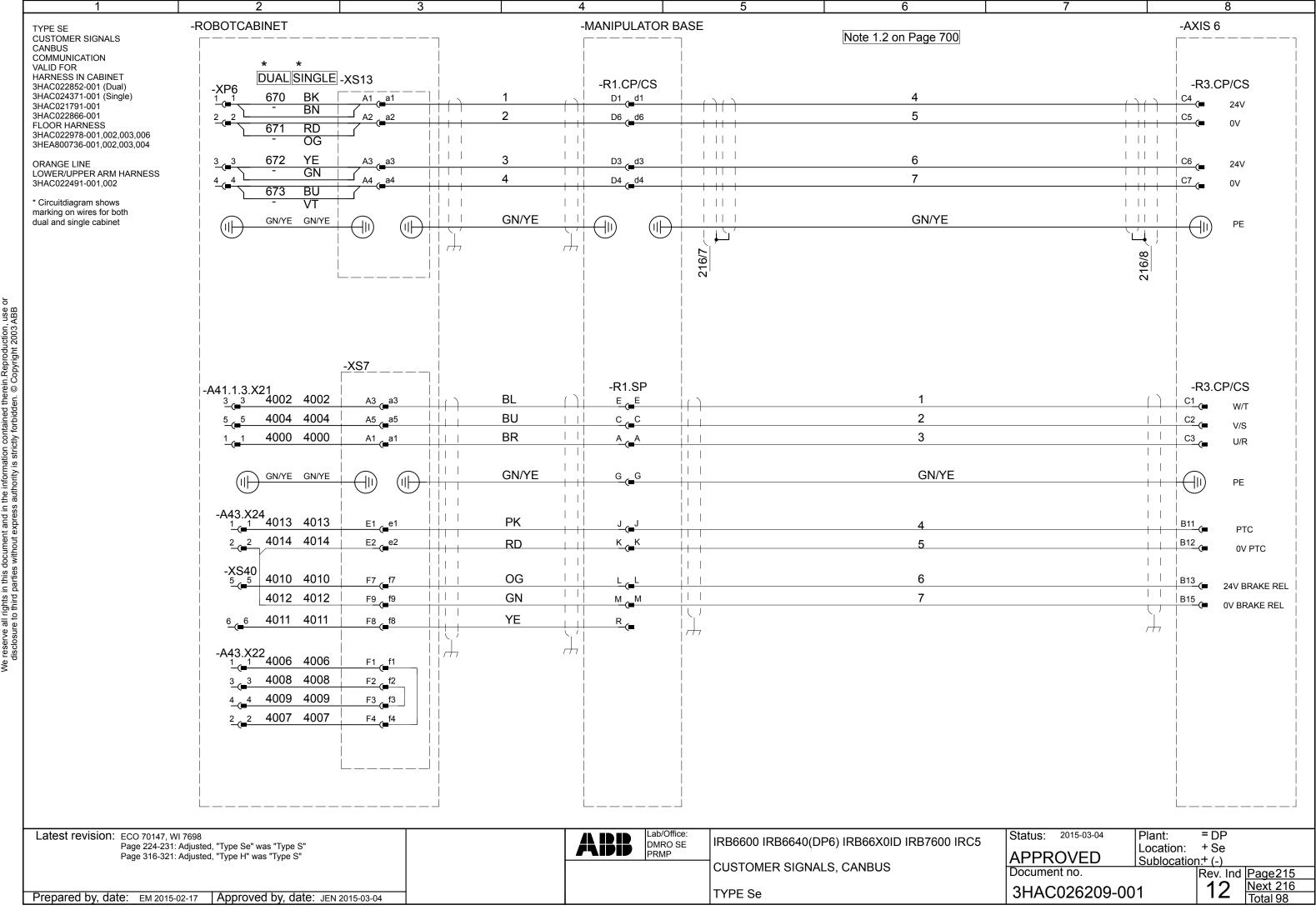


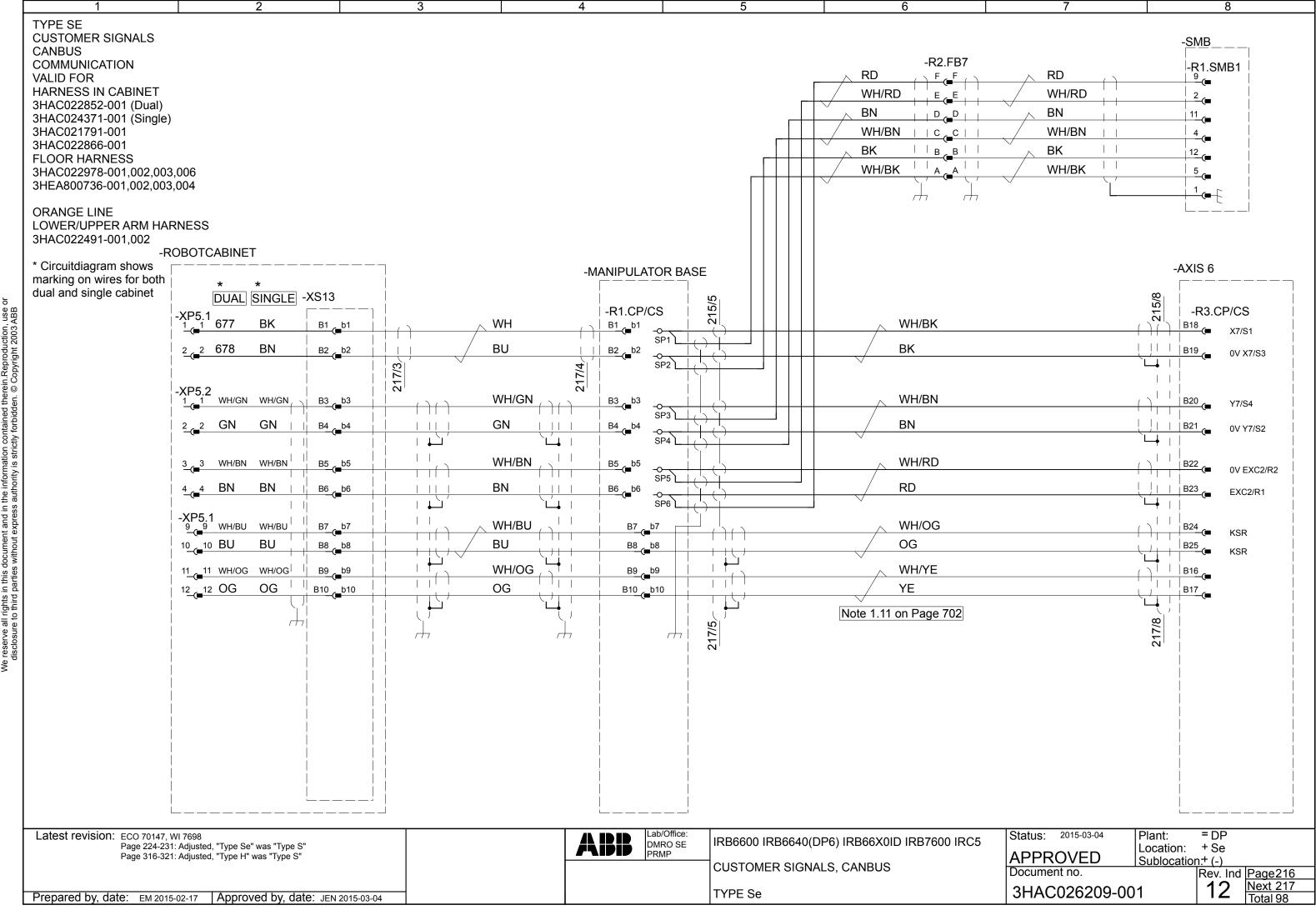
6 -ROBOTCABINET -MANIPULATOR BASE -AXIS 3 -AXIS 6 TYPE SE 210/6 201/7 210/8 201/4 **CUSTOMER SIGNALS** -XS13 DUAL SINGLE 21 -R1.CP/CS -R2.CP/CS -R3.CP/CS **PROFIBUS** 'n -XP5. WH WH/GN 679 RD WH/GN B11\_\_\_b11 B11\_\_b11 COMMUNICATION B11 \_ b11 B1\_(= **VALID FOR** B2\_( 680 OG OG GN GN B12 b12 B12\_b12 B12\_b12 HARNESS IN CABINET <u>B3</u> (**■** WH WH/BU WH/BU 681 YE B13 \_ b13 B13 b13 B13 b13 3HAC022852-001 (Dual) 3HAC024371-001 (Single) GN BU BU 682 GN B14 b14 B4\_(■ B14\_b14 B14\_b14 3HAC021791-001 -XP5.3 WH/VT 3HAC022868-001 <u>B5</u> (■ 693 GY WH WH/VT B15 b15 B15\_b15 B15\_b15 FLOOR HARNESS VT <u>B6</u> (■ BN VT 694 WH B16\_b16 B16\_b16 B16\_b16 3HAC022988-001,002,003,006 WH 3HEA800736-001,002,003,004 695 WH/BK WH/GY WH/GY B18 \_ b18 B18\_b18 B18\_b18 <u>B8</u> (■ GY GY GY 696 WH/BN B19\_b19 B19\_b19 B19\_b19 ORANGE LINE RD <u>B9</u> (**■** 697 WH/RD WH/BK WH/BK B20 b20 B20 b20 B20 b20 LOWER ARM HARNESS B10 3HAC022481-001 BU BK BK 698 WH/OG B21 b21 B21 b21 B21\_b21 **UPPER ARM HARNESS** -XP5.2 3HAC023173-001,002 WH/OG 685 GY RDWH/OG C16\_c16 C16\_c16 C16\_c16 OG OG OG 686 WH C17 c17 C17\_c17 C17\_c17 SILVER LINE LOWER ARM HARNESS 1 1 WH/BN RD WH/BN 687 WH/BK C18\_c18 C18\_c18 C18\_c18 3HAC022472-001 3HAC022473-001 BN B14\_( 683 BU GN C19 c19 C19\_c19 C19\_c19 BN **UPPER ARM HARNESS** 3HAC022477-001 -XP5.2 -1WH/RD 688 WH/BN RD WH/RD 3HAC022477-002 C20 c20 C20 c20 C20\_c20 3HAC022477-003 <u>C8</u> 684 VT BN RD RD C21\_c21 C21\_c21 C21\_c21 FOR IRB66x0ID **CONNECTION BETWEEN** R2.CP/CS AND R3.CP/CS SEE PAGE IRB66x0ID 689 WH/RD RD WH/BK WH/BK <u>A1</u> (■ LOWER ARM HARNESS B22 b22 B22\_b22 B22 b22 10 690 WH/OG 3HAC022481-001 <u>A2</u> GY B23 b23 B23 b23 BK B23 b23 BK **UPPER ARM HARNESS** 3HAC025532-001 WH/BN <u>A3</u> 1<u>1</u>11 691 WH/YE BK WH/BN B24 b24 B24 b24 B24\_\_b24 12\_\_\_12 692 WH/GN BU BN BN B25 b25 B25 b25 B25 b25 IRB6660 **LOWER ARM HARNESS** 3HAC027105-001 699 WH/YE BK 5 YΕ <u>A7</u>(**■** 5 YΕ A3 \_\_a3 C10 c10 A3 a3 ΥE OG 6 700 WH/GN C11 c11 6 YΕ Circuitdiagram shows marking on wires for both -DP-M 1B\_(=1B RD RD dual and single cabinet <u>A9</u> (■ RD VT VT F5\_\_f5 A5\_\_a5 RXD/TXD-P 1A GN GN GN 8 VT A10 RXD/TXD-N A5\_( 666 WH/BU BK GN GN c12\_c12 A9\_\_a9 A9 \_\_a9 10 667 WH/VT GN 2 GN  $\perp$ GN A10 a10 C13 c13 A10\_a10 11\_\_\_11\_668 WH/GY 3 BK GN 3 GN C14 c14 A11\_a11 A11\_a11 A11\_ 12 669 BN/BK GN C15 c15 BN GN A12\_a12 A12\_a12 A12 +HHHLab/Office = DP 2015-03-04 Status: Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" Location: + Se Page 316-321: Adjusted, "Type H" was "Type S" APPROVED Sublocation: + AX3 CUSTOMER SIGNALS, PROFIBUS Document no. Rev. Ind Page211 Next +.(-)/21 3HAC026209-001 TYPE Se Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04



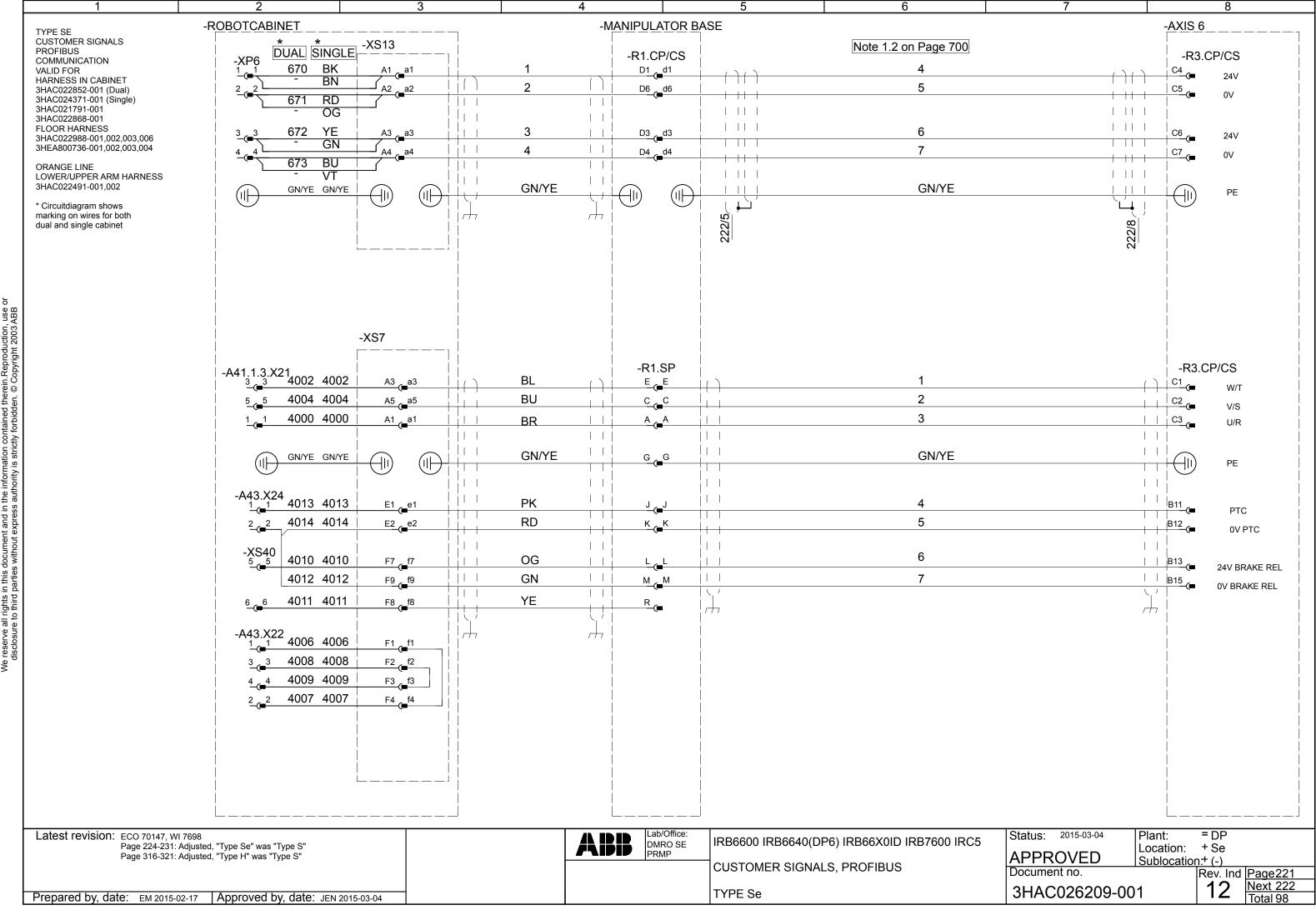


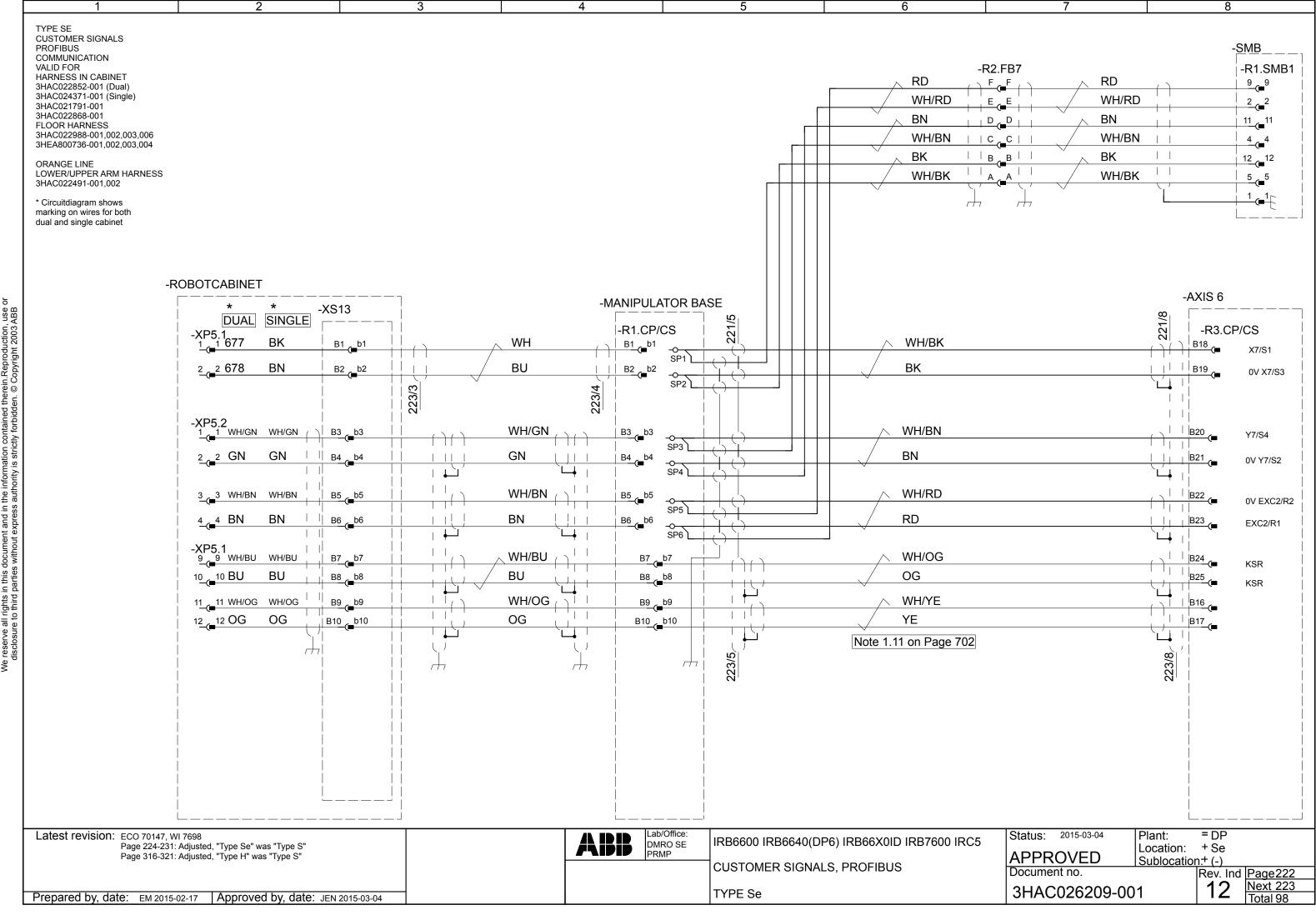
6 TYPE SE -ROBOTCABINET -MANIPULATOR BASE -AXIS 6 **CUSTOMER SIGNALS** -XS13 PARALLEL 213/3 213/8 213/4 COMMUNICATION DUAL SINGLE R3.CP/CS **VALID FOR** -R1.CP/CS -XP5.1 679 RD WH WH/GN <u>B1</u> (■ HARNESS IN CABINET B11 \_ b11 B11\_\_b11 3HAC022852-001 (Dual) <u>B2</u>( 680 OG OG GN B12\_b12 B12 \_\_b12 3HAC024371-001 (Single) WH WH/BU 681 YE B13 b13 B13 \_\_b13 B3 3HAC021791-001 <u>B4</u>(■ FLOOR HARNESS 682 GN GN BU B14 b14 B14\_b14 3HAC022957-001,002,003,006 3HEA800736-001,002,003,004 <u>B5</u> (■ 693 GY WH WH/VT B15 b15 B15\_b15 <u>B6</u> (■ BN VT 694 WH **ORANGE LINE** B16 \_\_b16 B16\_b16 LOWER/UPPER ARM HARNESS B7\_( WH WH/GY 695 WH/BK B18\_\_b18 B18 b18 3HAC022487-001,002 <u>B8</u> GY 696 WH/BN GY B19 b19 B19\_\_b19 5 697 WH/RD \* Circuitdiagram shows 1.1 I = IB9\_( RD WH/BK B20 b20 B20 b20 marking on wires for both 1 1 BU BK 698 WH/OG B21 b21 B21\_b21 dual and single cabinet RD 685 GY C16\_c16 C16\_ C17\_( OG 686 WH C17 \_\_c17 C18\_ RD687 WH/BK C18 \_ c18 BN 683 BU GN C19 c19 C19\_c19 B14\_( 1 1 RD688 WH/BN C20\_( C20 c20 684 VT BN RD C8\_(= C21 <u>A1</u> 1 1 RD WH/YE 689 WH/RD B22 b22 B22 10 690 WH/OG A2 (= GY YΕ B23 B23 b23 11\_\_\_\_11 691 WH/YE B24 b24 BK B24\_ WH A3\_( 12 692 WH/GN BU GN B25 b25 B25 Note 1.12 on Page 702 +699 WH/YE C10 8 8 700 WH/GN <u>C11</u> 9 666 WH/BU C12 10 667 WH/VT C13 11 668 WH/GY C14 12 12 669 BN/BK C15 Status: 2015-03-04 Lab/Office = DP Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" + Se Location: Page 316-321: Adjusted, "Type H" was "Type S" **APPROVED** Sublocation: (-) CUSTOMER SIGNALS, PARALLEL Document no. Rev. Ind Page214 Next 215 3HAC026209-001 TYPE Se Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04



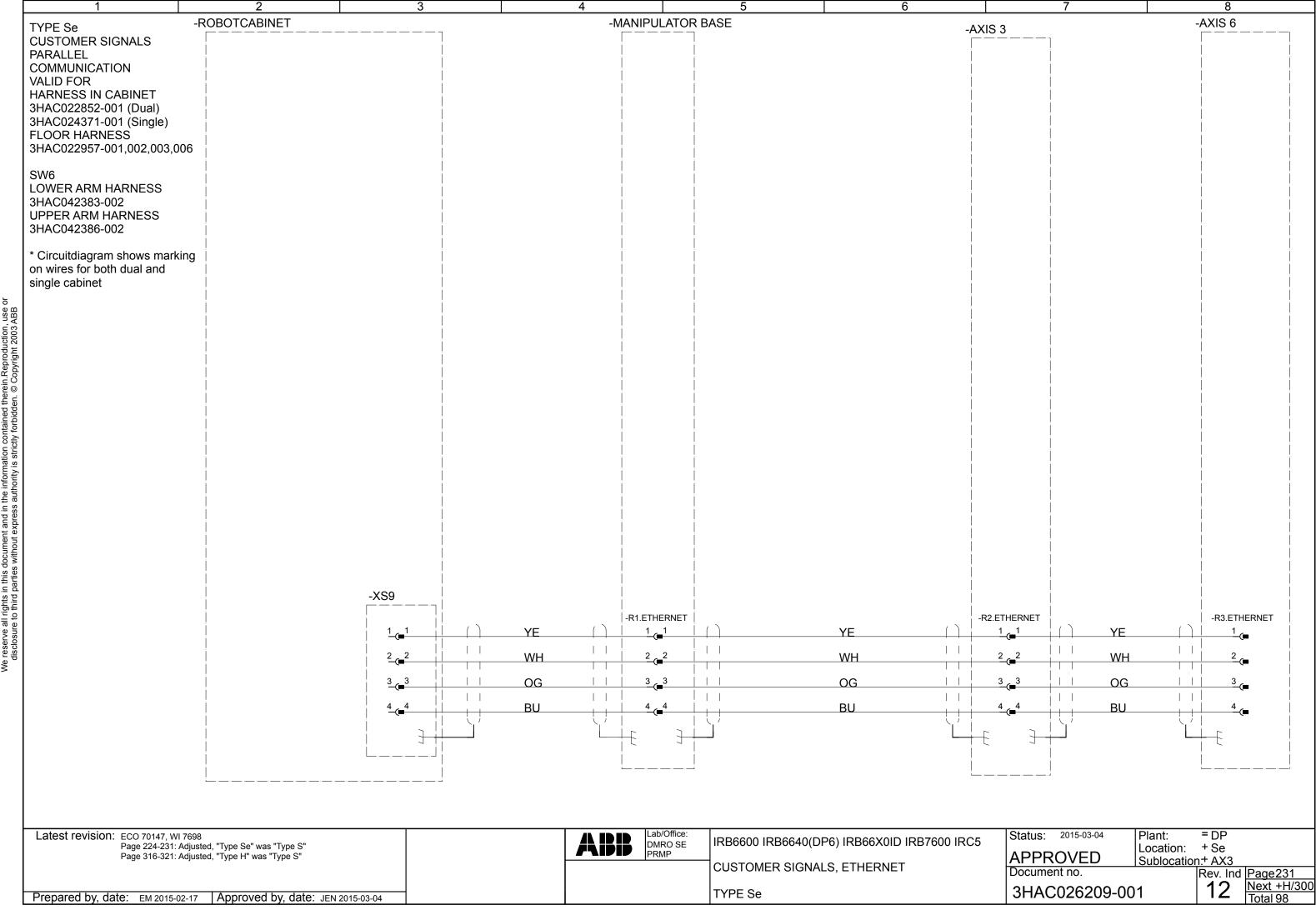


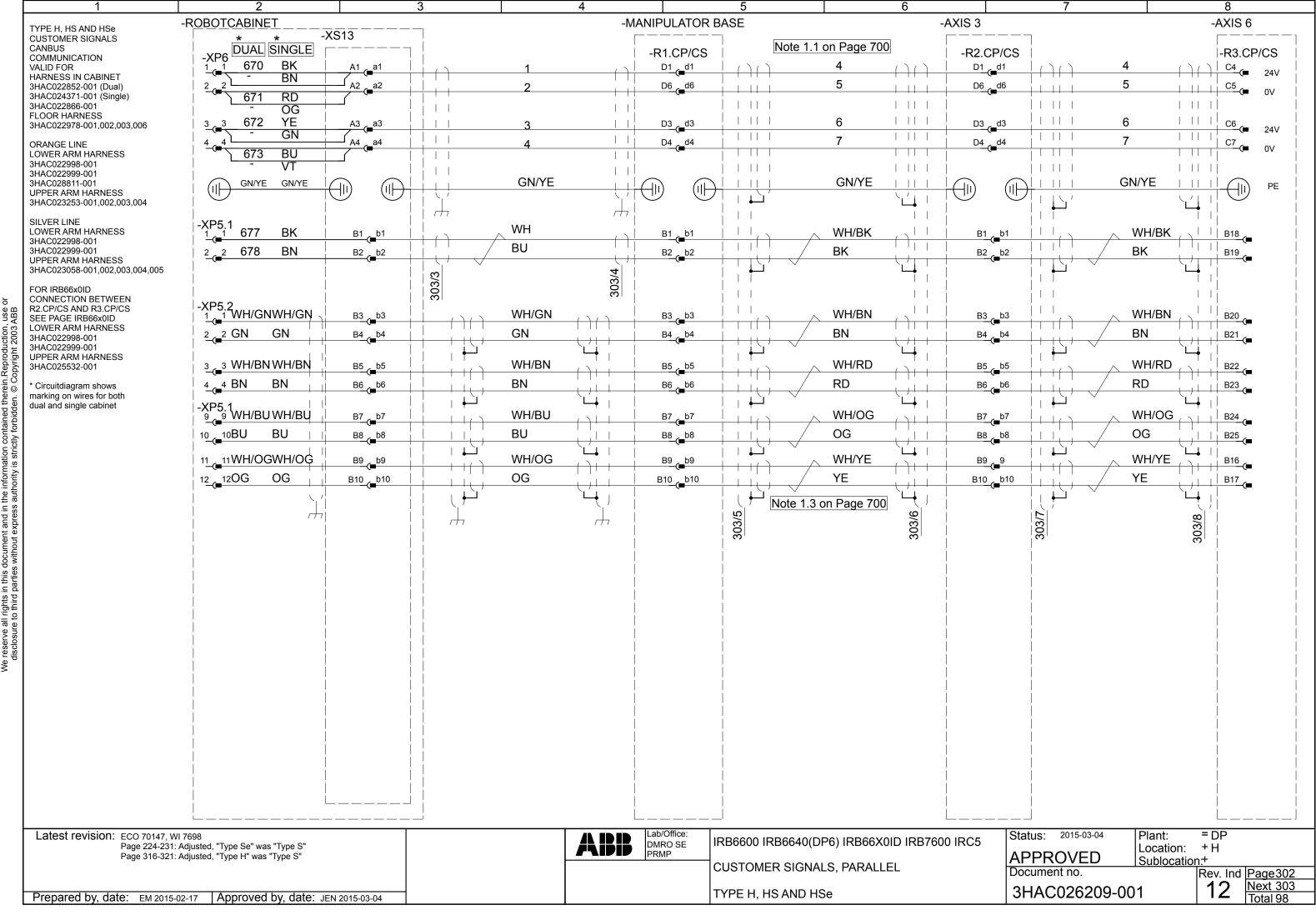
6 -ROBOTCABINET -MANIPULATOR BASE -AXIS 6 TYPE SE 216/3 216/8 216/4 216/4 **CUSTOMER SIGNALS** -XS13 DUAL SINGLE -R1.CP/CS -R3.CP/CS **CANBUS** WH WH/GN <u>B1</u> (■ 679 COMMUNICATION B11 \_ b11 B11\_\_\_b11 **VALID FOR** <u>B2</u> (■ 4 680 OG GN OG B12 b12 B12 b12 HARNESS IN CABINET 5 681 <u>B3</u> (**■** WH WH/BU B13 b13 B13\_b13 3HAC022852-001(Dual) 6 68<u>2</u> <u>B4</u>(■ GN  $\perp$ 3HAC024371-001 (Single) BU GN B14\_\_\_b14 B14 b14 3HAC021791-001 3HAC022866-001 693 GΥ WH WH/VT B15 b15 B15 b15 B5\_( FLOOR HARNESS <u>B6</u> (■ -1WH BN VT 694 B16 b16 B16 b16 3HAC022978-001,002,003,006 <u>B7</u>(■ 3HEA800736-001,002,003,004 WH/BK WH WH/GY 695 B18 b18 B18\_\_\_b18 <u>B8</u> GY GY 696 WH/BN B19 b19 B19 b19 **ORANGE LINE** <u>5</u> <u>5</u> <u>69</u>7 RD WH/BK WH/RD B9\_( B20 b20 LOWER/UPPER ARM HARNESS B20 b20 3HAC022491-001,002 | | B10 6 698 BU BK WH/OG B21 b21 B21 b21 \* Circuitdiagram shows 685 GΥ RD C16 c16 C16\_c16 marking on wires for both OG 686 WH C17 c17 C17\_c17 dual and single cabinet RD 687 WH/BK C18 c18 C18\_c18 -XP5,1 | | B14 BU GN BN 683 C19 c19 C19\_c19 -1RD WH/BN C20 c20 C20\_c20 -XP5.1 8 8 684 VT <u>C8</u> BN RD C21 c21 C21\_c21 -A35.X2 5 RD RD RD WH/BK F1\_f1 B22 b22 +24V CAN BK BK BK BK <u>A2</u>(■ F2\_f2 B23 b23 0V CAN A3\_( 691 WH/YE BK WH/BN B24 b24 B24\_\_b24 12 12 692 WH/GN BU BN A4\_( B25 b25 B25 b25 689 WH/RD B<u>22</u> (■ 10\_\_\_10 690 WH/OG B23 -1-A35.X2 <u>A7</u>(■ WH WH WH 5 YΕ F3\_f3 A3\_\_a3 CAN\_H 6 <u>A8</u> (■ F4\_(=f4 BU YΕ BU BU A4\_(=a4 CAN L <u>A9</u> (■ 699 WH/YE BK C10 \_ c10 A5 a5 VT A10 700 WH/GN OG 8 VT C11 c11 A6 \_\_a6 9\_9 666 WH/BU A5\_( BK GN C12 c12 A9\_\_a9 10 667 WH/VT GN 2 <u>A6</u> (■ GN C13 c13 A10 a10 11\_\_\_11\_668\_WH/GY BK 3 GN A11\_( C14\_c14 A11\_\_a11 12\_\_\_12 669 BN/BK  $\perp$ 4 GN A12\_( BN C15 c15 A12\_a12 Status: 2015-03-04 = DP Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" + Se Location: **APPROVED** Page 316-321: Adjusted, "Type H" was "Type S" Sublocation: (-) **CUSTOMER SIGNALS, CANBUS** Document no. Rev. Ind Page217 Next 221 3HAC026209-001 TYPE Se Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04





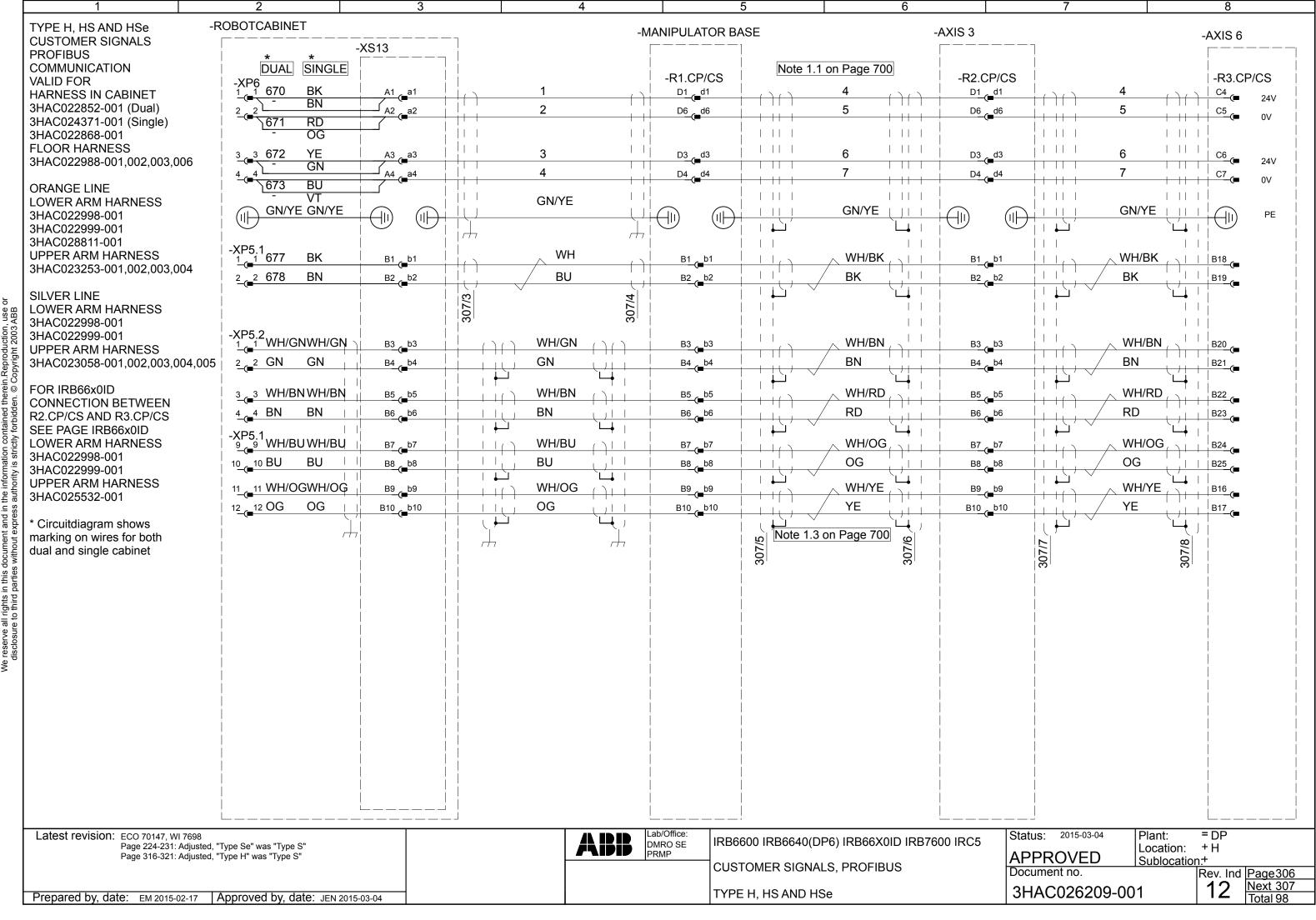
6 -ROBOTCABINET -MANIPULATOR BASE -AXIS 6 TYPE SE CUSTOMER SIGNALS -XS13 222/ **PROFIBUS** DUAL SINGLE -R1.CP/CS -R3.CP/CS COMMUNICATION <u>B1</u> (■ WH WH/GN RD VALID FOR B11 \_ b11 B11\_b11 HARNESS IN CABINET B2\_( 680 OG OG GN 3HAC022852-001 (Dual) B12\_b12 B12\_b12 3HAC024371-001 (Single) <u>B3</u> (■ WH WH/BU 681 YΕ B13 b13 B13 b13 3HAC021791-001 3HAC022868-001 <u>B4</u> (■ GN BU 682 GN B14 b14 B14 b14 FLOOR HARNESS 3HAC022988-001,002,003,006 -XP5.3 3HEA800736-001,002,003,004 <u>B5</u> (■ 693 GY WH WH/VT B15 b15 B15\_b15 ORANGE LINE <u>B6</u> (■ BN VT 694 WH B16 b16 B16\_b16 LOWER/UPPER ARM HARNESS 3HAC022491-001,002 WH <u>B7</u> (■ 695 WH/BK WH/GY B18 b18 B18 b18 \* Circuitdiagram shows B8 (F 696 WH/BN GY GY B19 b19 B19\_b19 marking on wires for both dual and single cabinet 697 <u>B9</u> (**■** WH/RD RD WH/BK B20 b20 B20 b20 BU BK 698 WH/OG B21 b21 B10 B21\_b21 -XP5.2 685 GY RDC16\_c16 C16\_ C17\_( 686 WH OG C17 c17 We reserve all rights in this document and in the information contained therein.Reproduction, use disclosure to third parties without express authority is strictly forbidden. © Copyright 2003 ABB 687 WH/BK RD C18 C18 \_\_c18 -XP5<u>.</u>1 BN 683 BU GN C19\_c19 C19\_b19 | | B14 -XP5.2 RD 688 WH/BN C20 c20 C20 -XP5.1 <u>C8</u> 684 VT BN RD C21\_c21 C21\_b21 -XP5.2 RD WH/BK 689 WH/RD B22 b22 B22\_b22 A1\_(= A2\_(= B23 b23 690 WH/OG GΥ BK B23 b23 BK WH/BN 691 WH/YE B24 b24 B24\_b24 A3\_(= BU BN 692 WH/GN <u>A4</u> (■ B25 b25 B25\_b25 -XP5,3 <u>A7</u> (■ BK YΕ 699 WH/YE 5 A3 \_\_a3 C10 c10 <u>A8</u> (■ YΕ OG 6 700 WH/GN C11 c11 -DP-M RDRD RD VT <u>A9</u> (■ F5\_\_f5 RXD/TXD-P GN 8 VT GN GN A10\_( 1<u>A</u>\_(<u>1</u>A RXD/TXD-N -XP5.3 A5\_( 666 WH/BU BK GN C12\_c12 A9\_\_a7 A6\_(= GN GN 667 WH/VT A10 a10 C13 c13 668 WH/GY BK GN A11\_( C14 c14 A11\_a11 A12\_( GN 669 BN/BK BN C15 c15 A12 a12  $\rightarrow$ HHLab/Office Status: 2015-03-04 = DP Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" Location: + Se Page 316-321: Adjusted, "Type H" was "Type S" **APPROVED** Sublocation: (-) CUSTOMER SIGNALS, PROFIBUS Document no. Rev. Ind Page223 Next +.AX3/2 3HAC026209-001 TYPE Se Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04



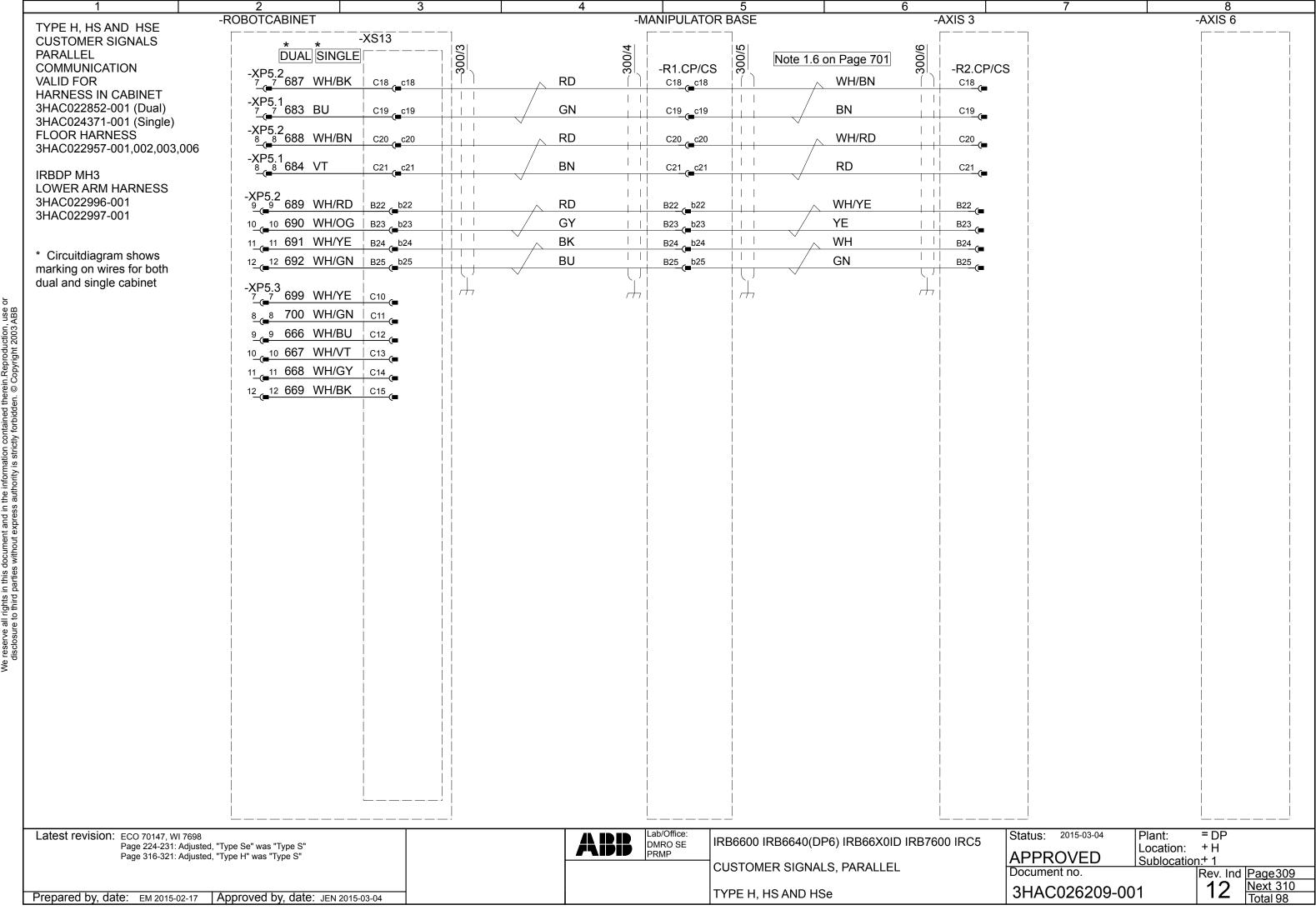


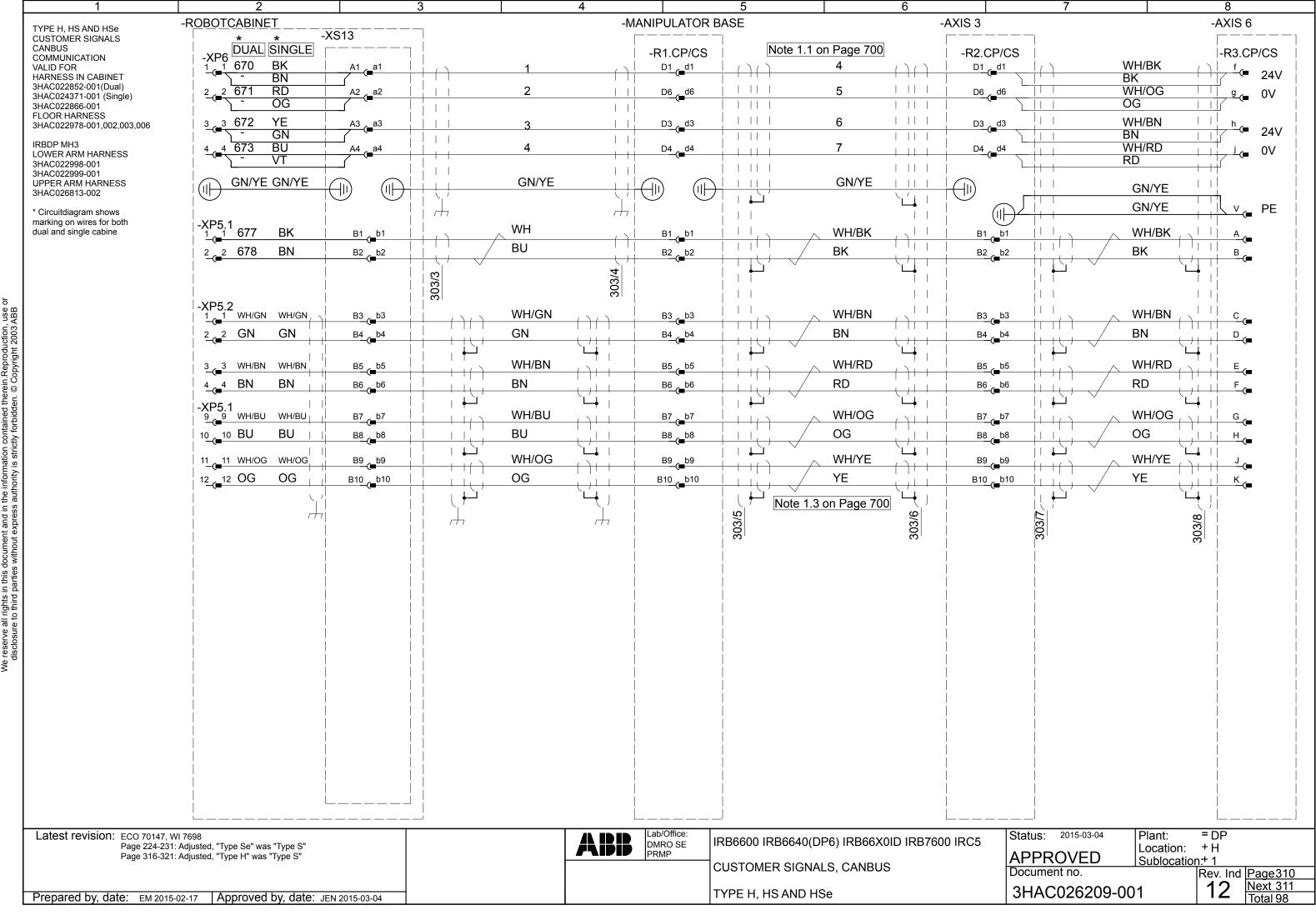
6 -ROBOTCABINET -MANIPULATOR BASE -AXIS 3 -AXIS 6 TYPE H. HS AND HSe 302/8 302/6 -XS13 302/ -R2.CP/CS **CUSTOMER SIGNALS DUAL** SINGLE -R3.CP/CS -R1.CP/CS -XP5.1 **CANBUS** WH/GN 679 RD WH WH/GN B11 \_b11 B11\_\_b11 a11\_\_a11 B1\_ COMMUNICATION OG GN B2\_( 680 OG GN B12 b12 **VALID FOR** B12\_a12 B12\_b12 WH WH/BU WH/BU HARNESS IN CABINET 681 YΕ B13 \_\_b13 B13\_b13 B13\_\_a13 B3\_( 3HAC022852-001 (Dual) GN BU BU B4\_**(**■ GN 682 B14\_\_\_b14 B14\_\_\_b14 B14 b14 3HAC024371-001 (Single) 3HAC022866-001 -XP5.3 WH/VT WH/VT WH B<u>5</u> 693 GY B15\_b15 B15 \_\_b15 B15 \_\_b15 **FLOOR HARNESS** BN VT 3HAC022978-001,002,003,006 VT 694 WH B16\_b16 B16 \_\_b16 B16\_\_b16 WH  $\perp$ WH/GY 695 WH/BK WH/GY B18\_b18 B18 \_\_b18 B18 \_\_b18 **ORANGE LINE** GY GY 696 WH/BN GΥ LOWER ARM HARNESS B19 \_b19 b19\_b19 B19\_b19 3HAC022998-001 RD WH/BK WH/RD 697 B20\_b20 WH/BK B20 b20 B20\_\_b20 B9 3HAC022999-001 B10 BU BK 698 WH/OG BK B21 b21 B21 b21 B21\_b21 3HAC028811-001 **UPPER ARM HARNESS** -XP5.2 RD WH/OG WH/OG | | B11\_( 685 GY C16\_c16 C16\_c16 C16\_c16 3HAC023253-001,002,003,004 | | B12 OG WH OG OG 686 C17\_c17 C17\_c17 C17\_c17 SILVER LINE RD 687 WH/BK WH/BN WH/BN C18 \_ c18 C18 \_ c18 C18\_b18 B13 LOWER ARM HARNESS 3HAC022998-001 -XP5<u>.</u>1 | | B14 GN BN BN 683 BU C19\_b19 3HAC022999-001 C19\_c19 C19\_c19 **UPPER ARM HARNESS** -XP5.2 RD | | B15 WH/RD WH/BN WH/RD 688 C20 b20 3HAC023058-001,002,003,004,005 C20 \_ c20 C20 c20 BN RD 684 VT RD C21 b21 C21\_c21 C21 \_ c21 C8\_( FOR IRB66x0ID **CONNECTION BETWEEN** -A35.X2 R2.CP/CS AND R3.CP/CS RD WH/BK WH/BK RD RD <u>A1</u> F1\_\_f1 B22 b22 B22 b22 SEE PAGE IRB66x0ID +24V CAN BK BK BK BK LOWER ARM HARNESS BK F2\_f2 B23\_b23 B23\_b23 A2 0V CAN 3HAC022998-001 3HAC022999-001 XP5.2 BK WH/BN WH/BN WH/YE A3\_ 691 B24 \_\_b24 B24\_\_b24 B24\_b24 **UPPER ARM HARNESS** BU 3HAC025532-001 BN BN WH/GN B25\_\_b25 12 12 692 B25\_b25 B25\_b25 A4 WH/RD B22 689 \* Circuitdiagram shows 10\_(=10 B23 marking on wires for both 690 WH/OG dual and single cabinet -A35.X2 WH YΕ 5 YΕ 5 WH WH A7 CAN\_H A3 \_\_a3 A3 \_\_a3 F3\_f3 BU YΕ YΕ BU BU F4\_f4 A8 CAN\_L -XP5<u>.</u>3 BK 699 WH/YE 7 VT 7 VT C10 c10 VT OG 8 8 VT A10 700 WH/GN C11 c11 BK GN GN 1 1 <u>A5</u> (■ 666 WH/BU C12 \_ c12 A9\_\_a9 A9\_a9 2 2 GN GN GN <u>A6</u> (**■** 10 10 667 WH/VT C13 c13 A10\_a10 A10\_a10 | | A11 BK 3 GN 3 GN WH/GY 668 C14 \_ c14 A11\_a11 BN GN 4 GN 4 12 12 669 BN/BK A12\_ A12\_a12 C15\_c15 A12 \_\_a12 Lab/Office = DP Status: 2015-03-04 Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" + H Location: Page 316-321: Adjusted, "Type H" was "Type S" APPROVED Sublocation:+ **CUSTOMER SIGNALS, CANBUS** Document no. Rev. Ind Page 303 Next 304 3HAC026209-001 TYPE H, HS AND HSe Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04

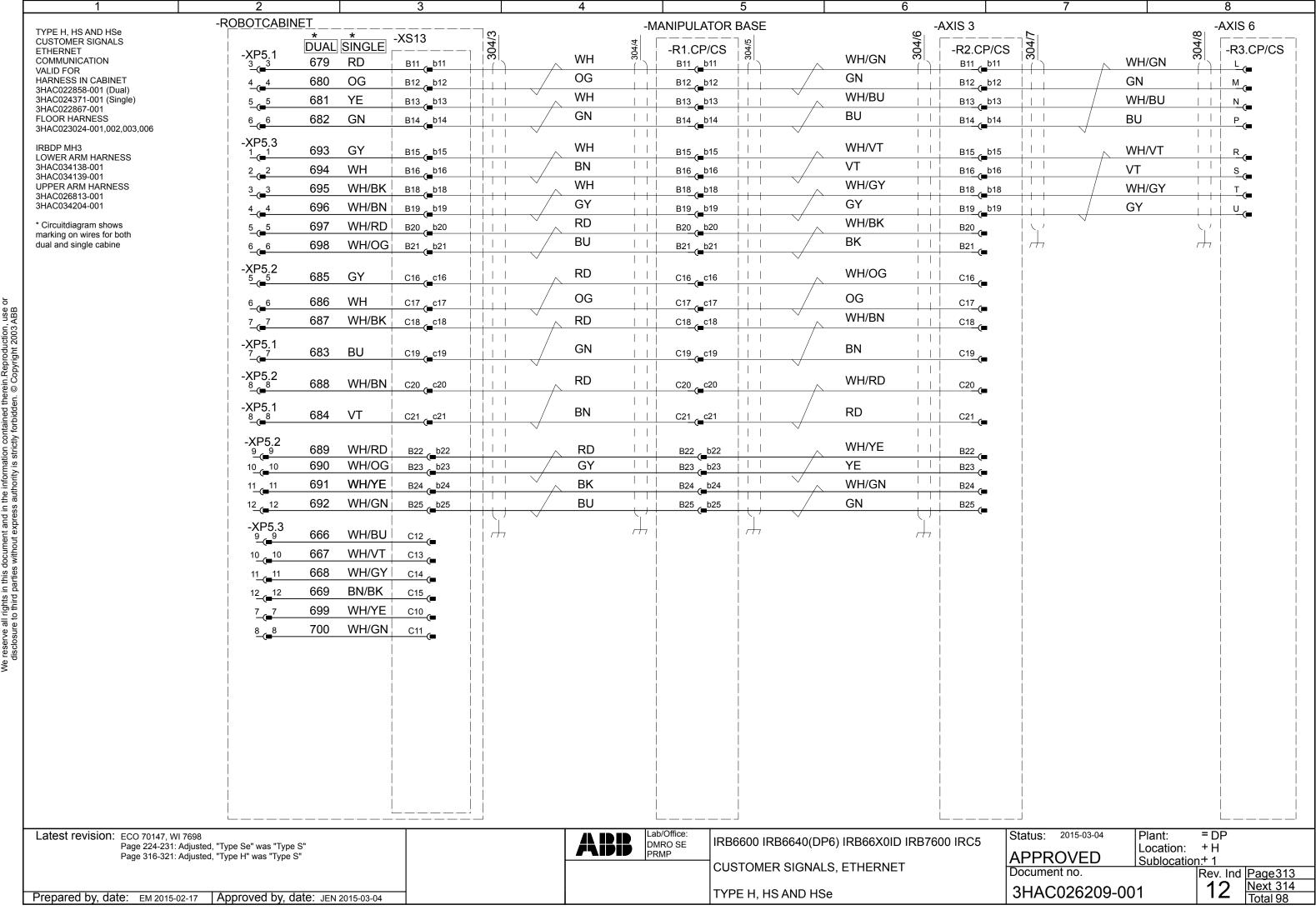
6 -ROBOTCABINET -MANIPULATOR BASE -AXIS 3 -AXIS 6 TYPE H. HS AND HSe 304/6 304/8 -XS13 **CUSTOMER SIGNALS** 304/ DUAL SÎNGLE -R3.CP/CS -R1.CP/CS -R2.CP/CS **ETHERNET** -XP5.1 WH WH/GN <u>B1</u> (■ 679 RD WH/GN B11 \_\_b11 B11\_\_b11 B11 \_\_b11 COMMUNICATION OG GN <u>B2</u> (■ OG GN VALID FOR 680 B12 b12 B12\_b12 B12\_b12 HARNESS IN CABINET WH WH/BU <u>B3</u> (**■** YΕ WH/BU 681 B13\_b13 B13 b13 B13\_b13 3HAC022852-001 (Dual) GN BU <u>B4</u> (■ GN BU 682 B14 b14 B14 b14 B14\_b14 3HAC024371-001 (Single) 3HAC022867-001 -XP5.3 WH WH/VT FLOOR HARNESS 693 GY WH/VT B15 \_\_b15 B15 \_\_b15 B15\_b15 B5\_\_\_ 3HAC023024-001,002,003,006 BN VT WH VT 694 B16 b16 <u>B6</u> (■ B16 b16 B16\_\_b16 WH WH/GY **ORANGE LINE** 695 WH/BK WH/GY <u>B7</u>(■ B18 b18 B18\_\_\_b18 B18\_\_b18 LOWER ARM HARNESS GY GΥ WH/BN GY 696 B19 b19 B19\_b19 B19\_\_\_b19 B8\_**(**■ 3HAC034141-001 RD WH/BK WH/RD WH/BK <u>B9</u> (**■** 697 B20 b20 B20 b20 B20\_b20 **UPPER ARM HARNESS** BU BK 3HAC023252-001,002,004 | | <sub>B10</sub> | | WH/OG BK 6\_6 698 B21\_b21 B21\_\_b21 B21\_b21 -XP5.2 SILVER LINE | | B11 RD WH/OG 685 GY WH/OG C16 \_ c16 C16 \_\_c16 C16 \_\_c16 LOWER ARM HARNESS 3HAC034138-001 OG OG 686 WH OG C17\_c17 C17\_c17 C17\_c17 B12 3HAC034139-001 WH/BN 687 WH/BK RD WH/BN | | B13 **UPPER ARM HARNESS** C18 \_ c18 C18\_c18 C18 c18 3HAC034204-002 -XP5.1 3HAC026813-002 GN ΒN BU 683 BN | | B14\_ C19\_c19 C19 \_ c19 C19\_c19 -XP5.2 FOR IRB66X0ID RD WH/RD 688 WH/BN WH/RD B15 C20 c20 C20 c20 C20 c20 **CONNECTION BETWEEN** R2.CP/CS AND R3.CP/CS -XP5.1 BN RD RD 684 VT SEE PAGE IRB66X0ID C21\_c21 C21\_c21 C8\_ LOWER ARM HARNESS -XP5.2 3HAC034138-001 RD 1 1 WH/YE WH/YE 689 WH/RD B22\_\_b22 A1\_( B22 \_ B22 B22 \_\_b22 3HAC034139-001 YΕ YΕ 690 WH/OG GY 10\_\_\_10 B23 b23 B23 b23 B23 b23 A2\_( <u>A3</u> 11\_\_\_\_11 BK WH/GN Circuitdiagram shows 691 WH/YE WH/GN B24 b24 B24 b24 B24 \_\_b24 marking on wires for both 12\_\_\_12 BU 692 WH/GN B25 \_\_b25 GN GN <u>A4</u> (■ B25 b25 B25\_b25 dual and single cabinet -XP5.3 666 WH/BU C12 WH/VT 667 C13 10\_10 C14\_( 668 WH/GY 11\_\_\_11 C15 12 12 669 BN/BK C10 WH/YE 699 700 WH/GN C11 Lab/Office Status: 2015-03-04 = DP Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" + H Location: Page 316-321: Adjusted, "Type H" was "Type S" APPROVED Sublocation: 1 CUSTOMER SIGNALS, ETHERNET Document no. Rev. Ind Page 305 Next 306 3HAC026209-001 TYPE H, HS AND HSe Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04



-ROBOTCABINET -MANIPULATOR BASE -AXIS 3 -AXIS 6 TYPE H. HS AND HSe -XS13 **CUSTOMER SIGNALS** 306/3 306/8 **PROFIBUS** 306/ DUAL SINGLE COMMUNICATION -R1.CP/CS -R2.CP/CS -R3.CP/CS **VALID FOR** -XP5.1 <u>B1</u> (■ RD WH WH/GN WH/GN 679 B11 \_\_b11 B11\_\_b11 B11\_\_b11 HARNESS IN CABINET B2\_( 1 1 OG 680 OG B12 \_\_b23 GN B12\_b12 GN 3HAC022852-001 (Dual) B12\_b12 3HAC024371-001 (Single) <u>B3</u> (■ WH WH/BU 681 YE B13 \_ b13 B13 \_ b13 B13\_b13 WH/BU 3HAC022868-001 <u>B4</u> (■ 682 GN B14 b14 GN BU BU B14\_b14 B14 b14 FLOOR HARNESS 3HAC022988-001,002,003,006 XP5.3 693 GY WH WH/VT WH/VT B15 \_\_b15 B15\_b15 B15 \_\_b15 B5\_\_ **ORANGE LINE** 694 WH VT VT BN <u>B6</u> B16 \_\_b16 B16\_b16 B16\_b16 LOWER ARM HARNESS 695 WH/BK WH WH/GY WH/GY B7\_**(**■ 3HAC022998-001 B18\_\_b18 B18\_\_b18 B18 \_\_b18 3HAC022999-001 B8\_\_ 696 WH/BN GY GΥ GY b19\_\_b19 B19\_b19 B19\_b19 3HAC028811-001 1 <u>B9</u> 697 WH/RD RD WH/BK WH/BK B20 b20 B20 b20 B20 b20 **UPPER ARM HARNESS** B10 3HAC023253-001,002,003,004 698 WH/OG B21 b21 BU BK BK B21\_\_b21 B21\_\_\_b21 SILVER LINE -XP5.2 685 GY RD WH/OG WH/OG B11 C16\_\_c16 C16\_c16 C16\_c16 LOWER ARM HARNESS 3HAC022998-001 | | B12 OG OG OG 686 WH C17\_c17 C17\_c17 C17\_c17 3HAC022999-001 RD WH/BN WH/BN B13 687 WH/BK C18 \_ c18 C18\_c18 C18\_c18 **UPPER ARM HARNESS** 3HAC023058-001,002,003,004,005 -XP5.1 B14 683 BU GN BN BN C19\_c19 C19 c19 C19\_\_c19 FOR IRB66x0ID -XP5.2 **CONNECTION BETWEEN** RD WH/RD 688 WH/BN C20\_c20 WH/RD C20\_c20 C20 \_c20 B15 R2.CP/CS AND R3.CP/CS SEE PAGE IRB66x0ID -XP5.1 <u>C8</u> BN RD RD 684 VT C21\_c21 C21\_c21 LOWER ARM HARNESS C21\_c21 3HAC022998-001 3HAC022999-001 -XP5.2 689 WH/RD WH/BK <u>A1</u> RD WH/BK B22 b22 B22 \_\_b22 **UPPER ARM HARNESS** B22 \_\_b22 3HAC025532-001 GY 10\_\_10 690 WH/OG BK BK B23 \_\_b23 B23 \_b23 B23\_b23 A2\_( | A3 11\_\_\_\_11 BK WH/BN 691 WH/YE B24 b24 WH/BN B24\_\_b24 B24\_\_b24 Circuitdiagram shows marking on wires for both 12 12 692 WH/GN BU BN ΒN B25 b25 B25\_b25 B25 b25 dual and single cabinet -XP5.3 699 WH/YE BK YΕ YΕ C10\_\_c10 A3\_\_a3 A3\_\_a3 OG 6 YΕ YΕ <u>A8</u> (■ 700 WH/GN C11 c11 A4\_\_a4 -DP-M 1B\_\_1B <u>A9</u> (■ RD RD F5\_\_f5 RD VT VT A5\_\_a5 A5\_a5 RXD/TXD-P GN GN F6\_\_f6 GN 8 VT 8 VT A10\_( RXD/TXD-N -XP5.3 666 WH/BU BK GN GN C12\_c12 A9 \_\_a9 A9 \_\_a9 2 GN 10\_(=10 GN GN 667 WH/VT A6\_( C13 c13 A10\_a10 A10\_a10 -1668 WH/GY BK 3 GN 3 GN 11\_\_\_11 C14\_c14 A11\_\_a11 | A11\_ A11\_\_a11 12\_\_\_\_12 | A12 669 BN/BK BN GN GN C15 c15 A12 a12 A12\_a12 = DP 2015-03-04 Status: Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" Location: + H Page 316-321: Adjusted, "Type H" was "Type S" APPROVED Sublocation:+ CUSTOMER SIGNALS, PROFIBUS Document no. Rev. Ind Page 307 Next +.1/308 3HAC026209-001 TYPE H, HS AND HSe Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04

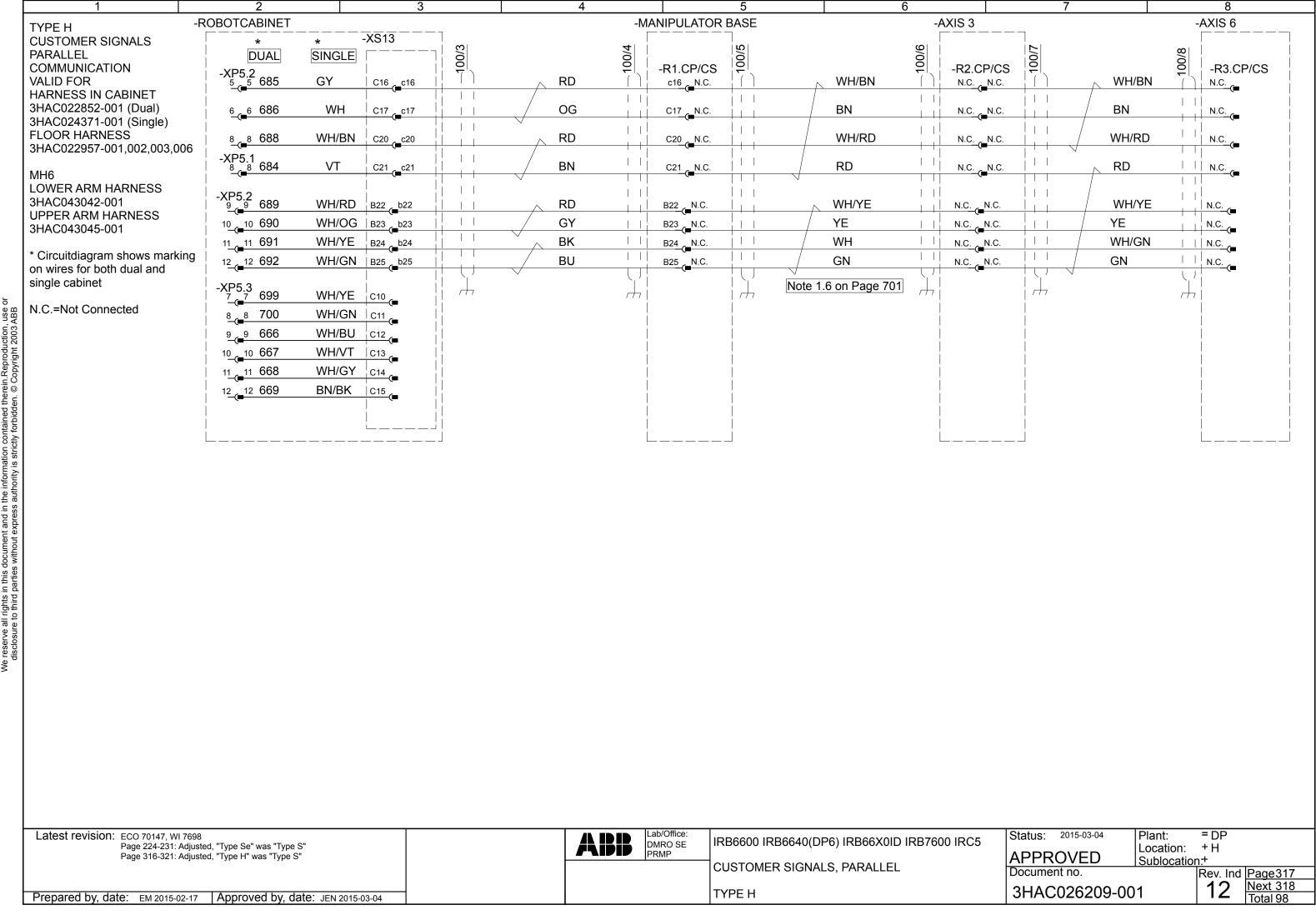


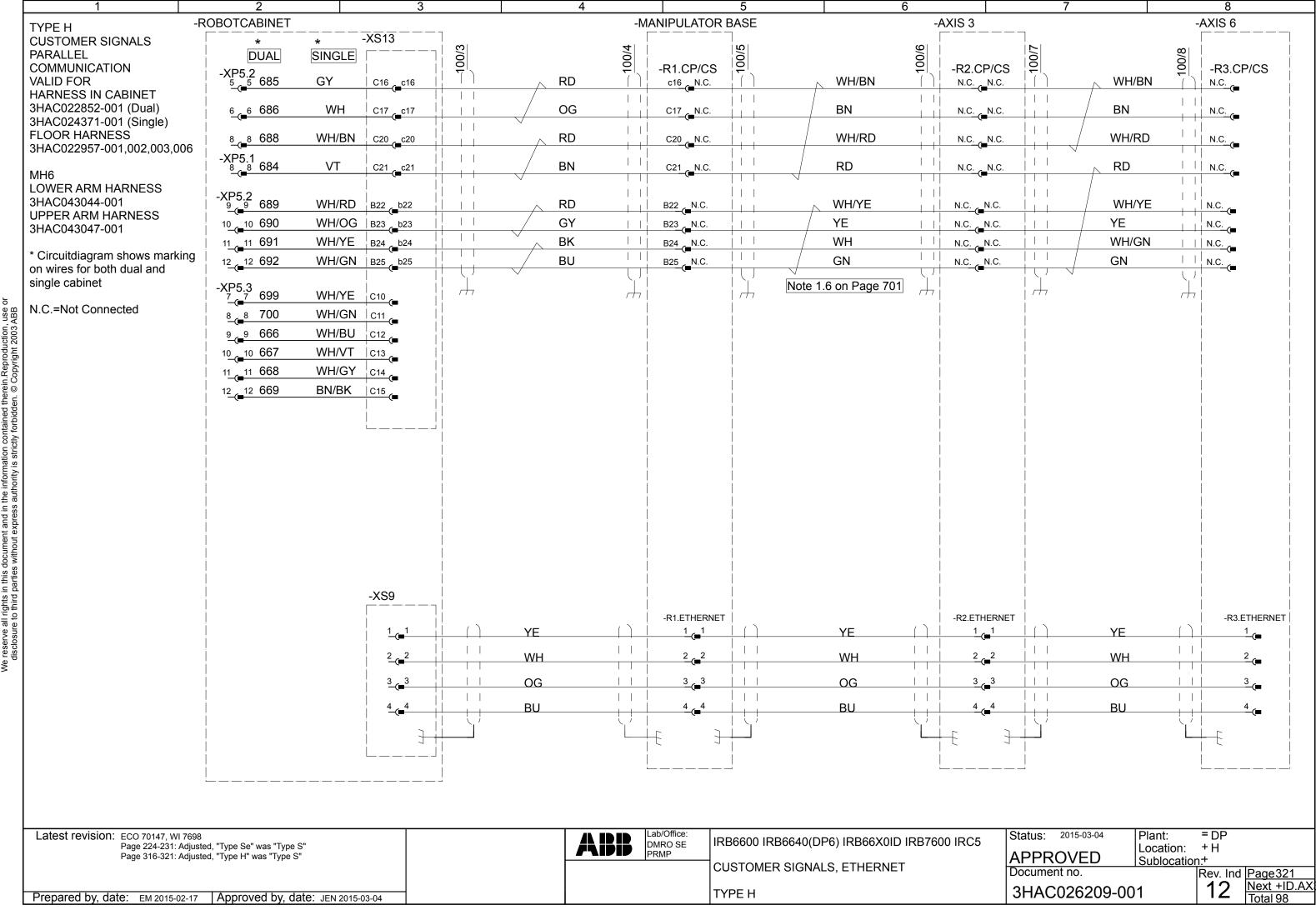


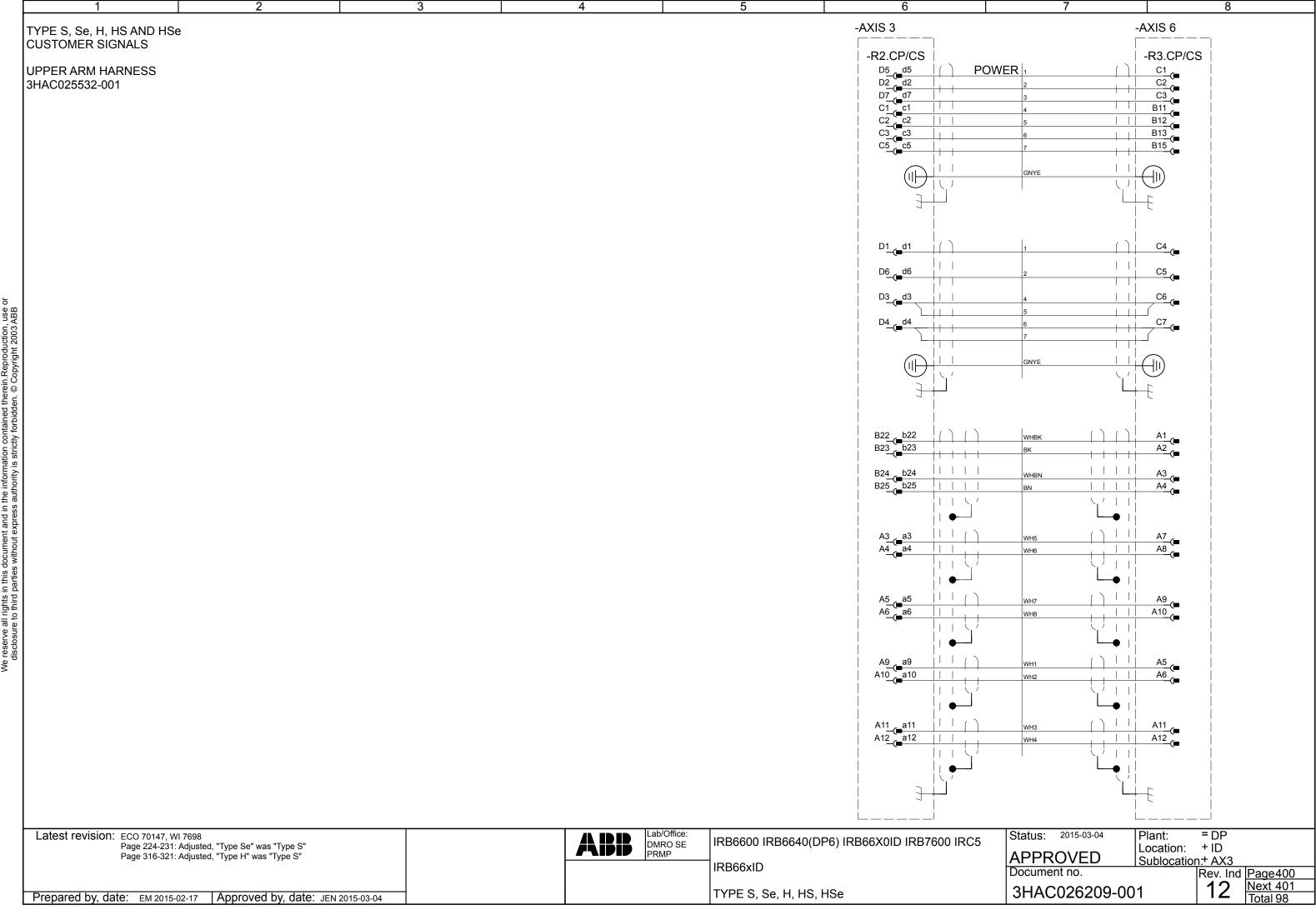


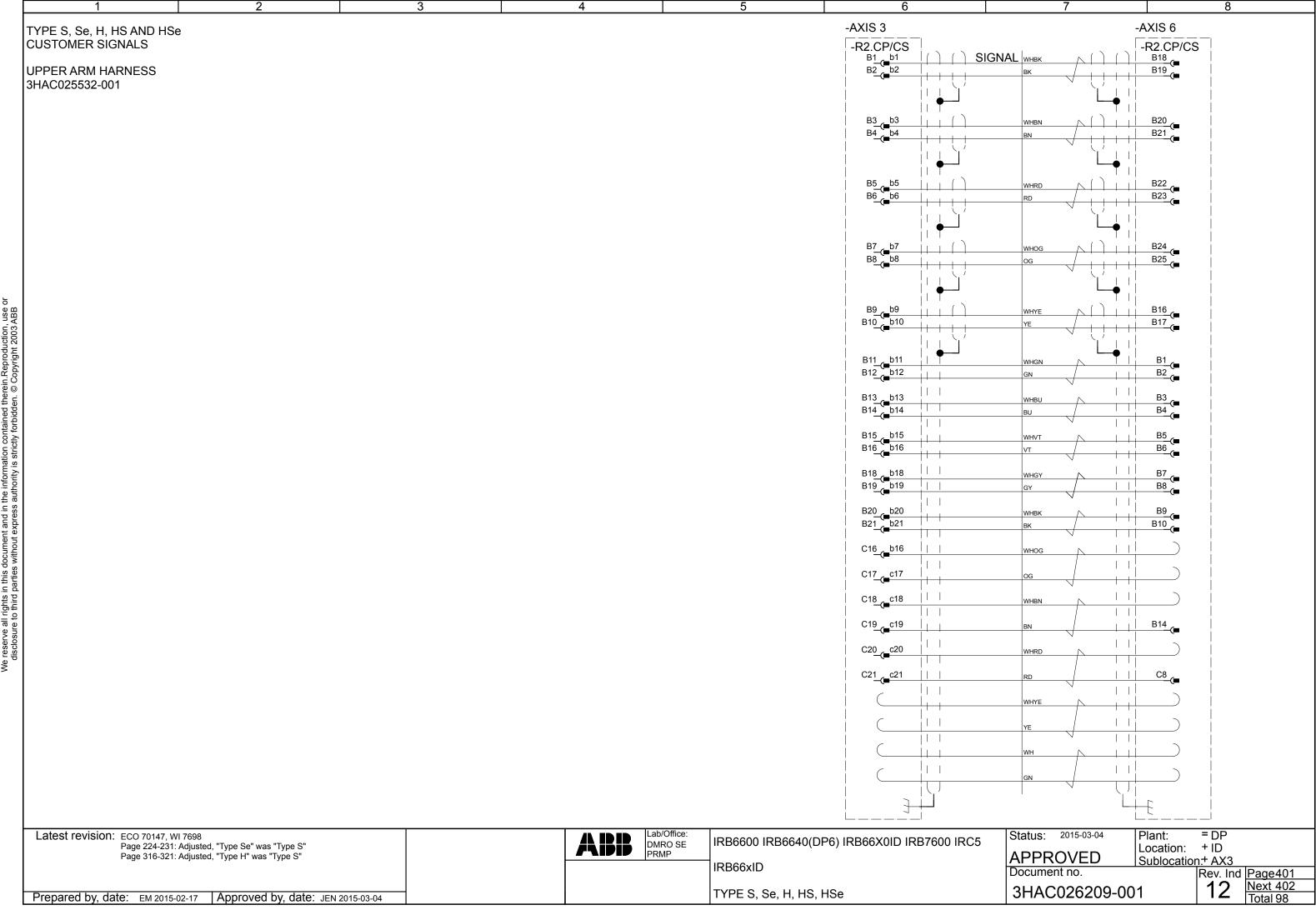
-ROBOTCABINET TYPE H, HS AND HSe -AXIS 3 -MANIPULATOR BASE -AXIS 6 **CUSTOMER SIGNALS** -XS13 **PROFIBUS** COMMUNICATION Note 1.1 on Page 700 DUAL SINGLE -R2.CP/CS -R1.CP/CS -R3.CP/CS **VALID FOR** 670 BK WH/BK A1 \_a1 D1\_d1 HARNESS IN CABINET 24V BN BK 3HAC022852-001 (Dual) RD 5 671 WH/OG D6\_\_d6 D6\_\_d6 3HAC024371-001 (Single) 0V <u>og</u> OG 1 11 1 | | | | 3HAC022868-001 FLOOR HARNESS 1 11 1 WH/BN 6 672 YΕ A3 \_\_a3 3 D3\_d3 D3\_d3 24V 3HAC022988-001,002,003,006 GN BN BU WH/RD 673 D4\_d4 0V **IRBDP MH3** RD **GN/YE** LOWER ARM HARNESS GN/YE GN/YE **GN/YE** 3HAC022998-001 3HAC022999-001 **GN/YE** PΕ **UPPER ARM HARNESS** 3HAC026813-002 WH BK WH/BK WH/BK B1 \_b1 BU BK 2 678 BN BK B2 b2 B2 b2 B2 b2 \* Circuitdiagram shows marking on wires for both 307/4 307/3 dual and single cabine We reserve all rights in this document and in the information contained therein. Reproduction, use disclosure to third parties without express authority is strictly forbidden. © Copyright 2003 ABB WH/GN WH/BN WH/BN WH/GN WH/GN B3 b3 B3 b3 B3 b3 D BN GN BN GN GN B4 \_\_b4 B4\_\_\_b4 WH/RD WH/RD WH/BN WH/BN WH/BN B5 b5 B5 b5 RD RD BN BN ΒN B6 b6 `— -XP5.1 WH/BU WH/OG WH/OG B7 b7 WH/BU WH/BU | B7 \_\_b7 B7 b7 10 BU BU BU OG OG B8 \_\_b8 B8 \_\_b8 B8 \_\_b8 `**—** 11 WH/OG WH/OG WH/YE WH/YE WH/OG B9\_\_b9 B9\_\_\_b9 12 OG YΕ YΕ OG OG B10 b10 B10 b10 B10 b10 `**—** Note 1.3 on Page 700 307/6 H+Lab/Office Status: 2015-03-04 = DP Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" + H Location: Page 316-321: Adjusted, "Type H" was "Type S" **APPROVED** Sublocation: 1 CUSTOMER SIGNALS, PROFIBUS Document no. Rev. Ind Page314 Next 315 3HAC026209-001 TYPE H, HS AND HSe Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04

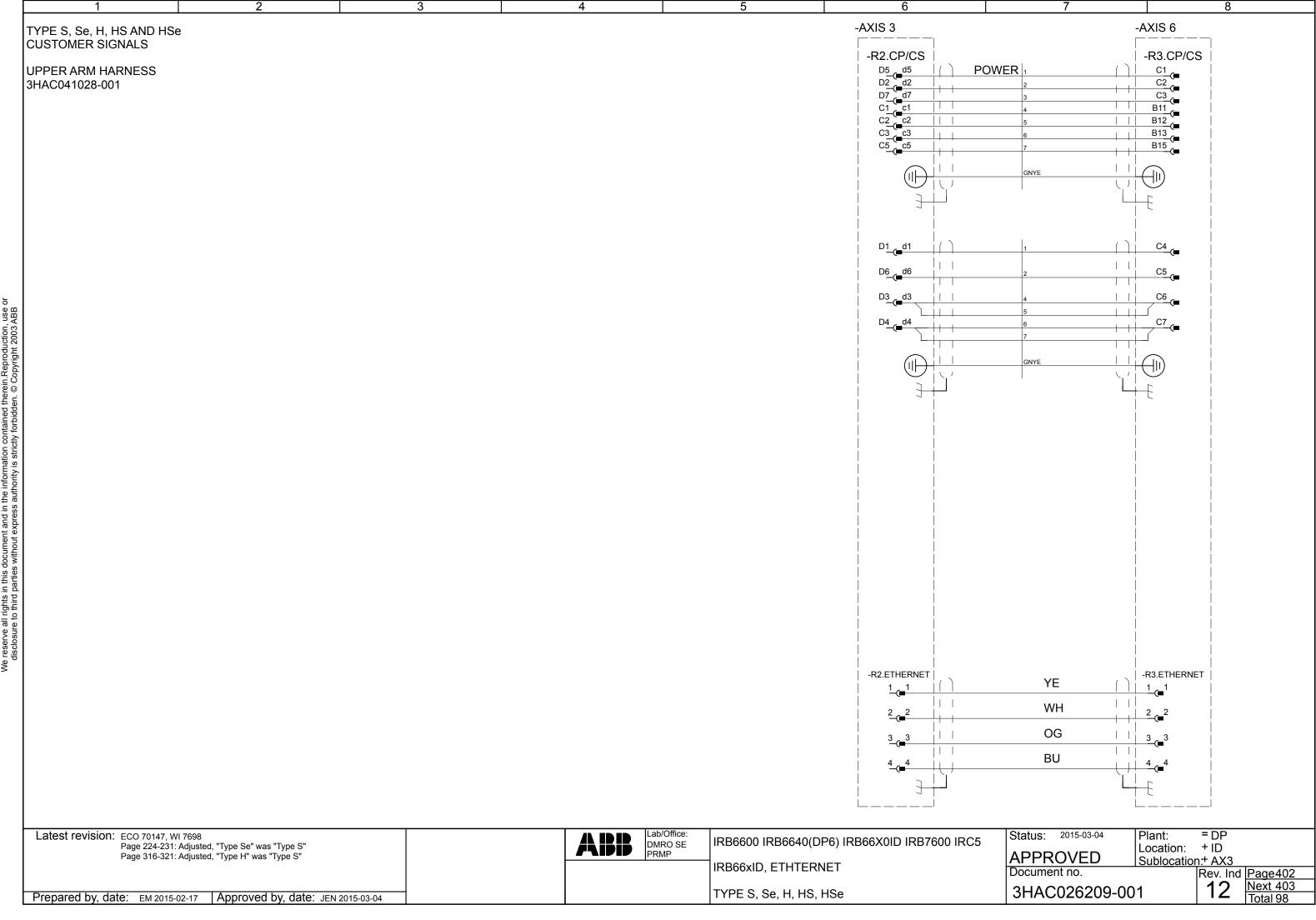
-ROBOTCABINET -MANIPULATOR BASE -AXIS 3 -AXIS 6 TYPE H, HS AND HSe -XS13 **CUSTOMER SIGNALS** 306/8 **PROFIBUS** 306/ DUAL SINGLE COMMUNICATION -R1.CP/CS -R2.CP/CS -R3.CP/CS **VALID FOR** -XP5.1 WH WH/GN WH/GN 679 RD B11 \_\_b11 B11\_\_b11 B11\_\_b11 HARNESS IN CABINET 1 1 OG 680 OG B12 \_\_b12 GN GN 3HAC022852-001 (Dual) B12\_b12 B12\_b12 3HAC024371-001 (Single) 681 YE B13 b13 WH B13\_b13 WH/BU B13 b13 WH/BU 3HAC022868-001 682 GN B14 b14 GN BU BU B14\_b14 B14 b14 FLOOR HARNESS 3HAC022988-001,002,003,006 -XP5.3 WH WH/VT WH/VT 693 GY B15\_b15 B15 \_\_b15 B15\_\_b15 **IRBDP MH3** VT VT 694 WH BN B16 \_\_b16 B16\_b16 B16\_b16 LOWER ARM HARNESS 695 WH/BK WH WH/GY WH/GY 3HAC022998-001 B18\_b18 B18\_\_b18 B18 \_\_b18 3HAC022999-001 U\_( WH/BN GY GY GY 696 b19\_\_b19 B19\_b19 B19\_b19 **UPPER ARM HARNESS** 1 B20\_**(■** 697 WH/RD RD WH/BK B20 b20 B20 b20 3HAC026813-002 698 WH/OG B21 b21 BU BK B21\_\_b21 B21\_ \* Circuitdiagram shows -XP5.2 marking on wires for both 685 GY RD WH/OG C16\_\_c16 C16\_c16 C16 dual and single cabine C17\_(= OG OG 686 WH C17\_c17 C17\_c17 RD C18 WH/BN 687 WH/BK C18 \_ c18 C18 \_ c18 -XP5.1 C19 683 BU GN BN C19 c19 C19\_\_c19 -XP5.2 RD WH/RD 688 WH/BN C20\_c20 C20 \_ c20 C20 -XP5.1 BN RD 684 VT C21\_c21 C21\_c21 C21 -R3.CBUS -XP5.2 689 WH/RD RD WH/BK WH/BK B22\_b22 B22 \_\_b22 B22 b22 10 10 690 WH/OG B23 \_\_b23 GY BK BK B23\_b23 B23\_b23 691 WH/YE BK WH/BN 11 11 WH/BN B24 \_ b24 B24\_\_b24 B24\_b24 692 WH/GN BU BN BN12 12 B25 \_\_b25 B25\_b25 B25 b25 -XP5.3 699 WH/YE BK YΕ YΕ C10\_c10 A3\_\_a3 A3 \_\_a3 OG 6 YΕ YΕ 700 WH/GN C11 c11 A4 (=a4 -DP-M 1B\_\_1B <u>G</u> RD RD F5\_\_f5 RD VT VT A5\_\_a5 A5\_a5 RXD/TXD-P GN GN GN 8 VT 8 VT F6\_\_f6 RXD/TXD-N -XP5.3 666 WH/BU BK GN GN C12 \_ c12 A9 \_\_a9 A9 \_\_a9 2 GN 10\_\_\_10 GN GN 667 WH/VT C13 c13 A10\_a10 A10\_a10 -1668 WH/GY BK GN 3 GN 11\_\_\_\_11 C14\_\_c14 A11\_\_a11 A11\_\_a11 669 BN/BK BN GN GN 12 12 C15 c15 A12\_a12 A12\_a12 Status: 2015-03-04 = DP Plant: Latest revision: ECO 70147, WI 7698 IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5 DMRO SE Page 224-231: Adjusted, "Type Se" was "Type S" + H Location: Page 316-321: Adjusted, "Type H" was "Type S" APPROVED Sublocation: 1 CUSTOMER SIGNALS, PROFIBUS Document no. Rev. Ind Page315 Next +./316 3HAC026209-001 TYPE H, HS AND HSe Prepared by, date: EM 2015-02-17 Approved by, date: JEN 2015-03-04

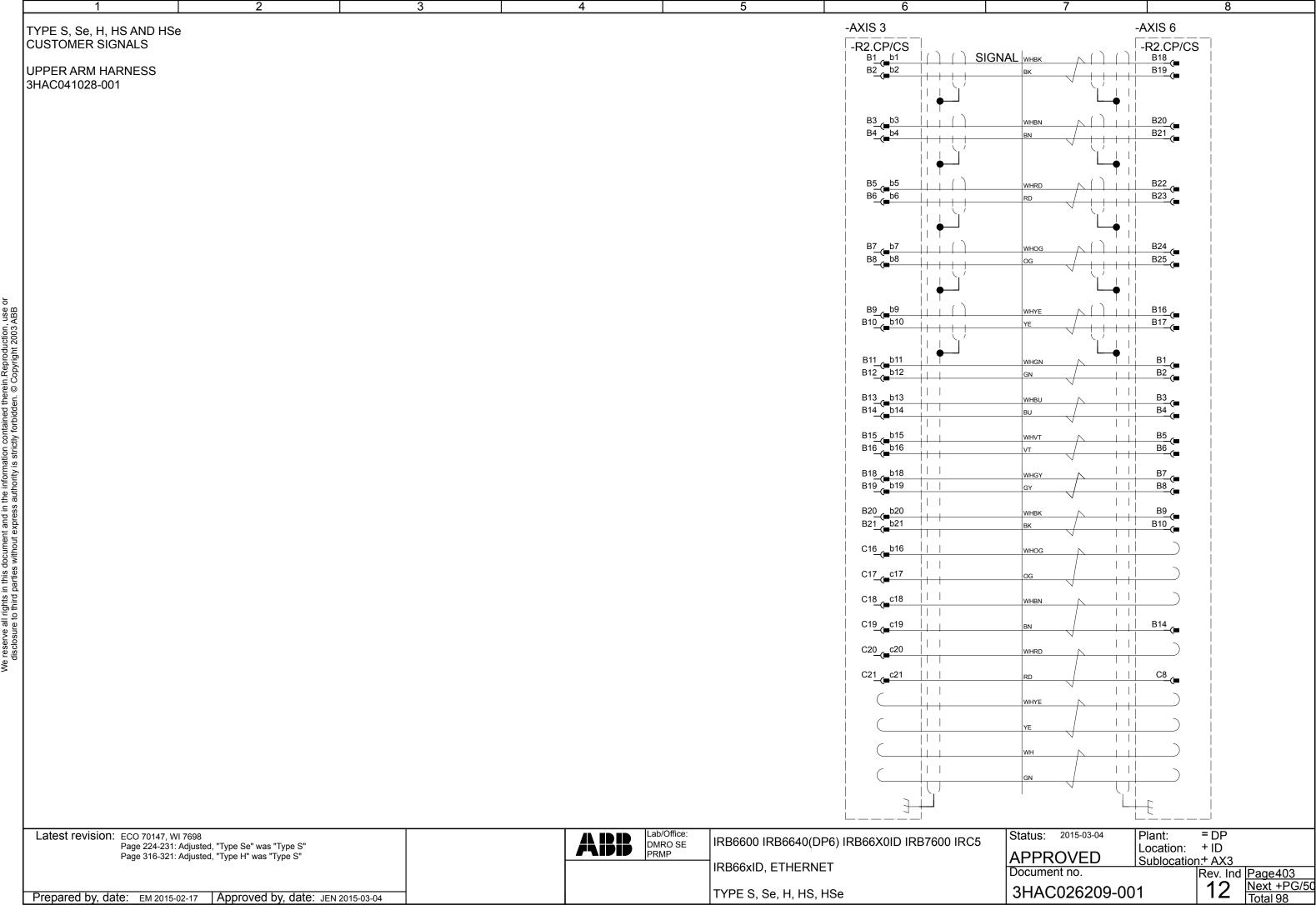


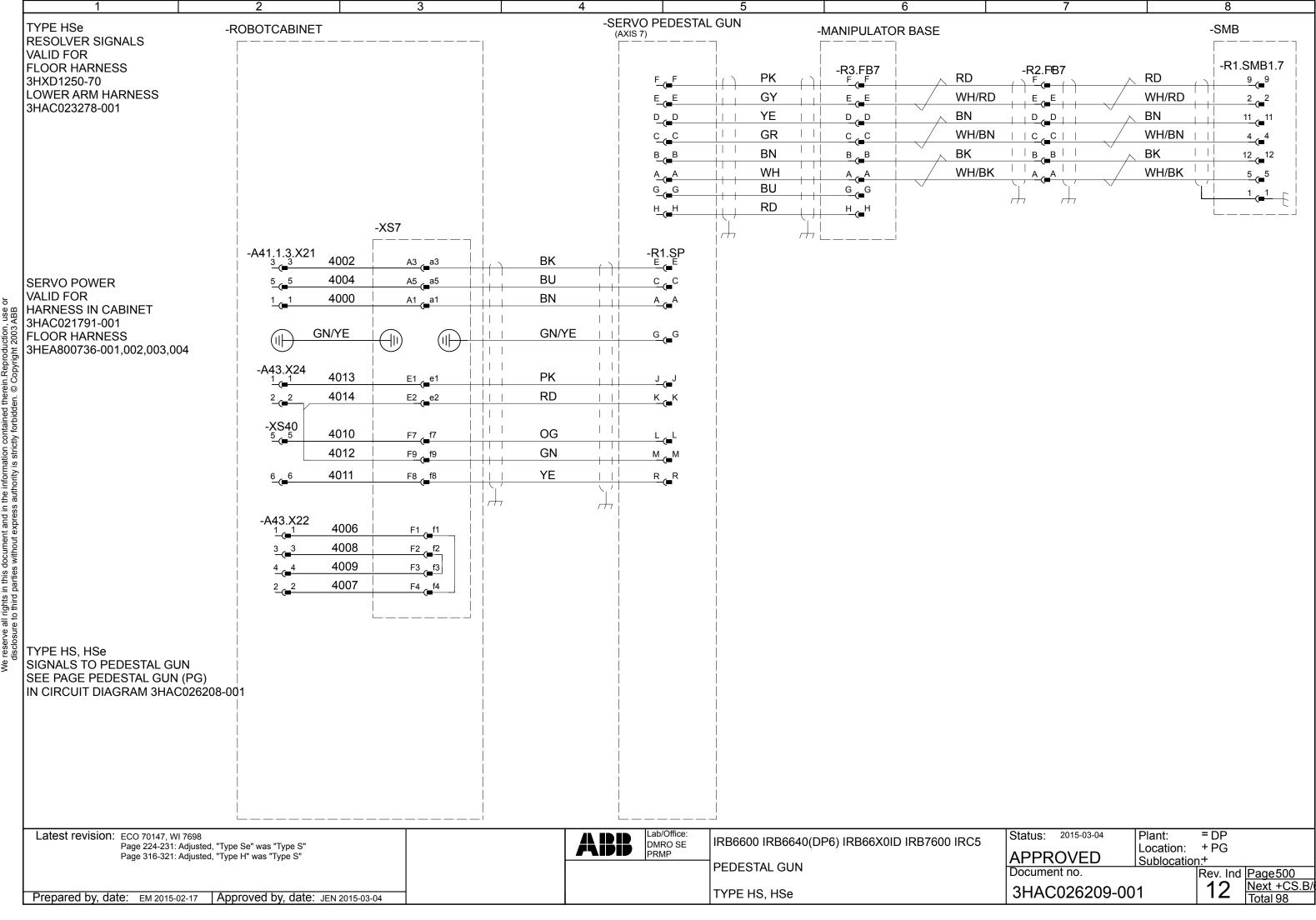


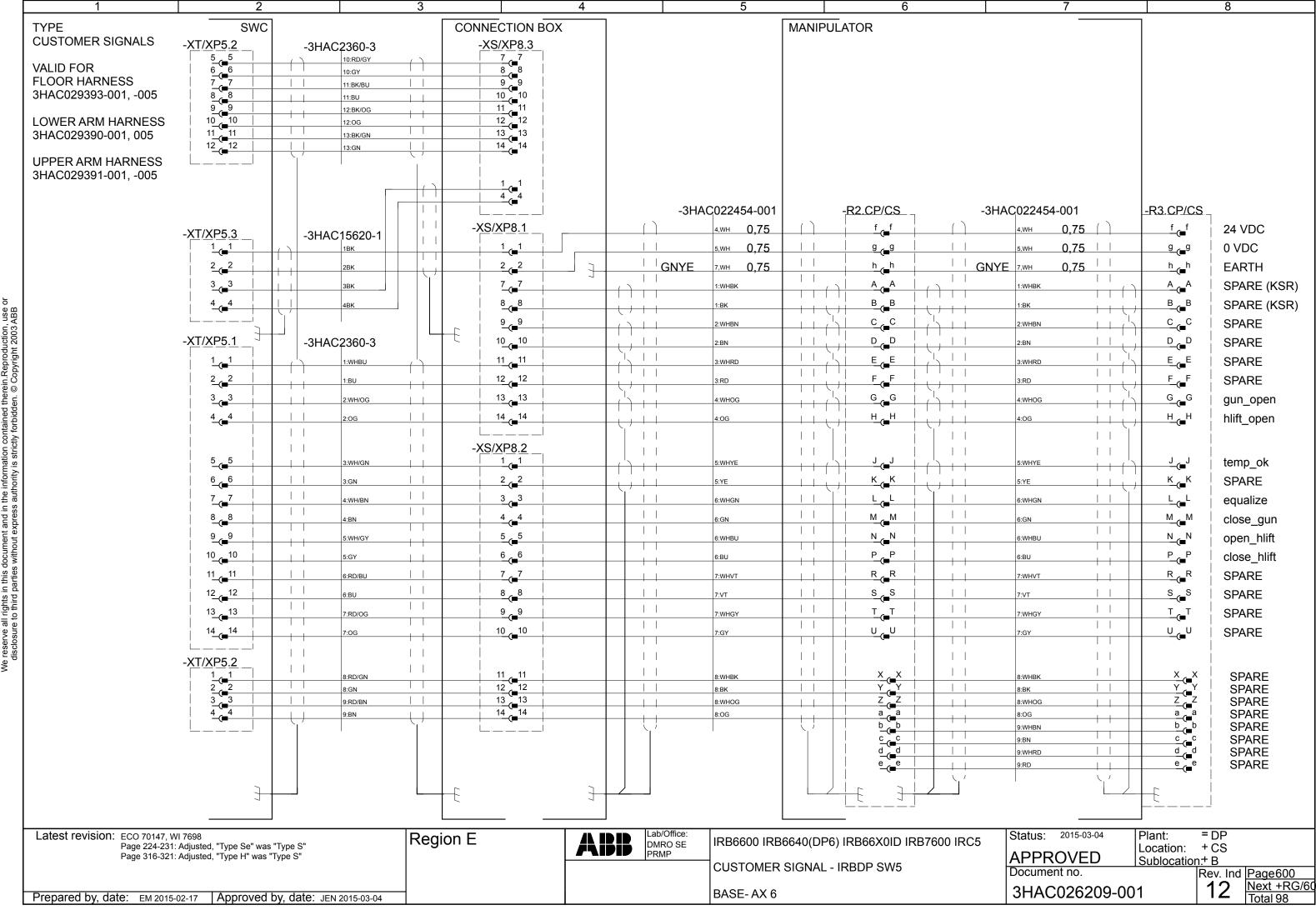


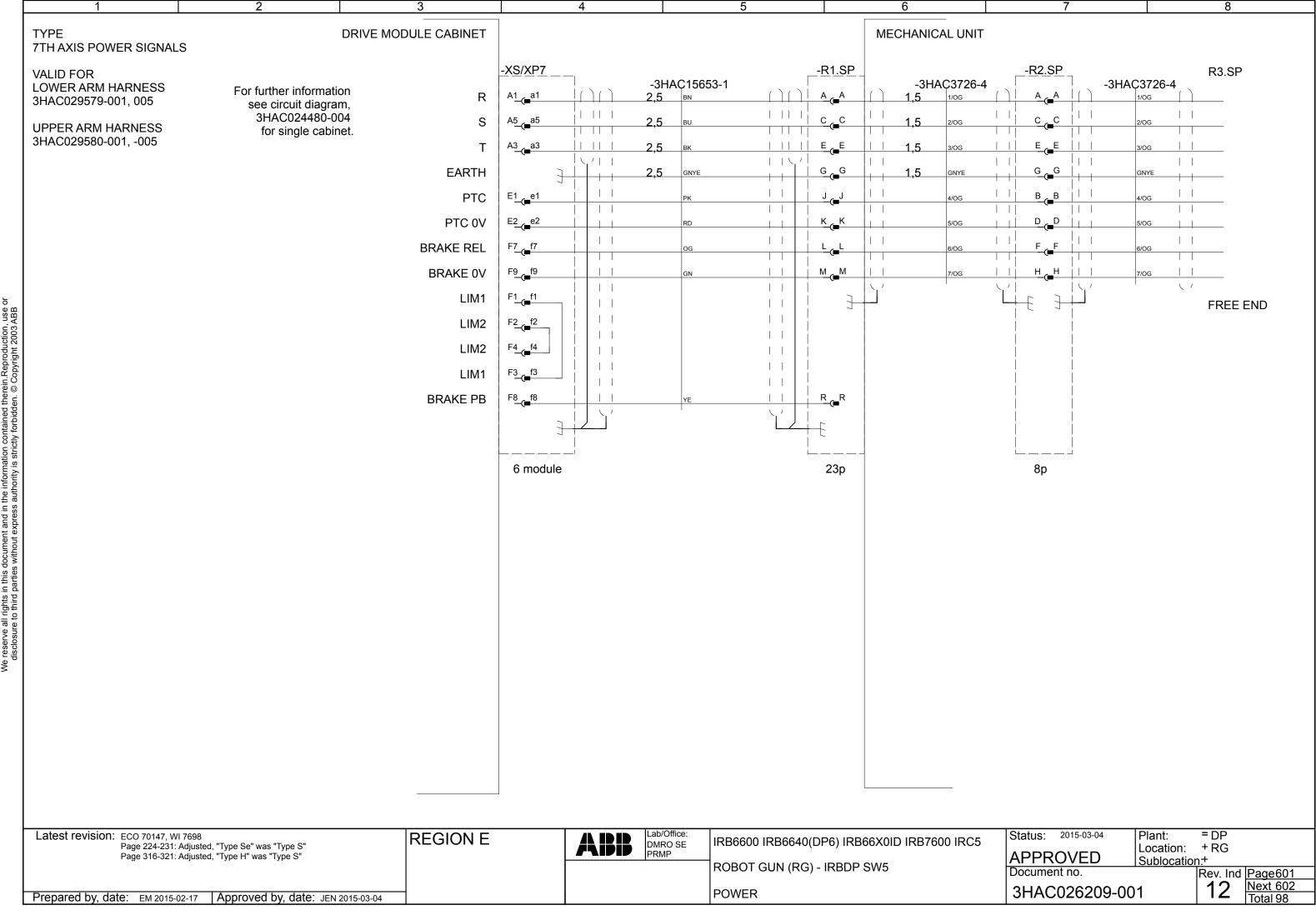


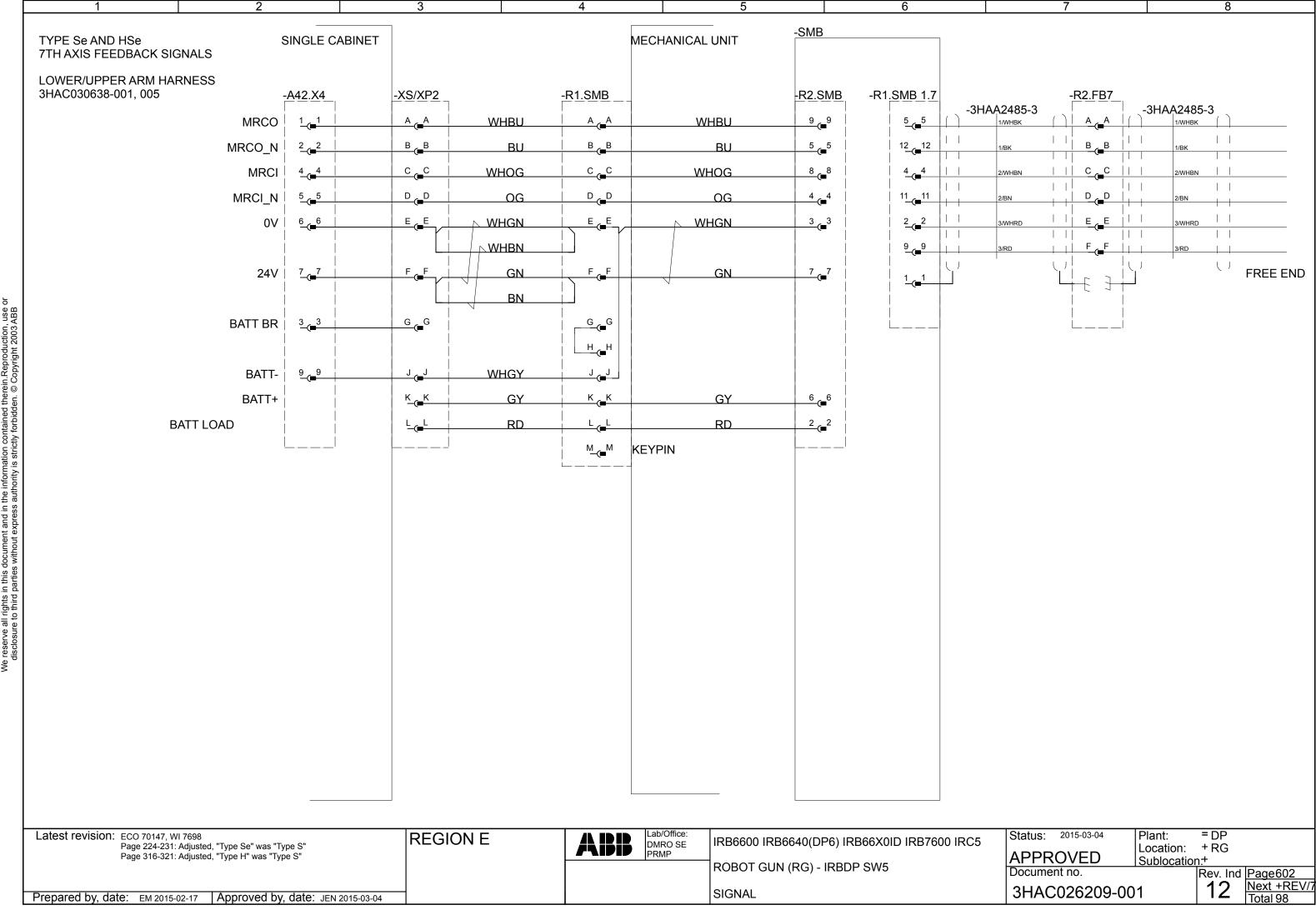


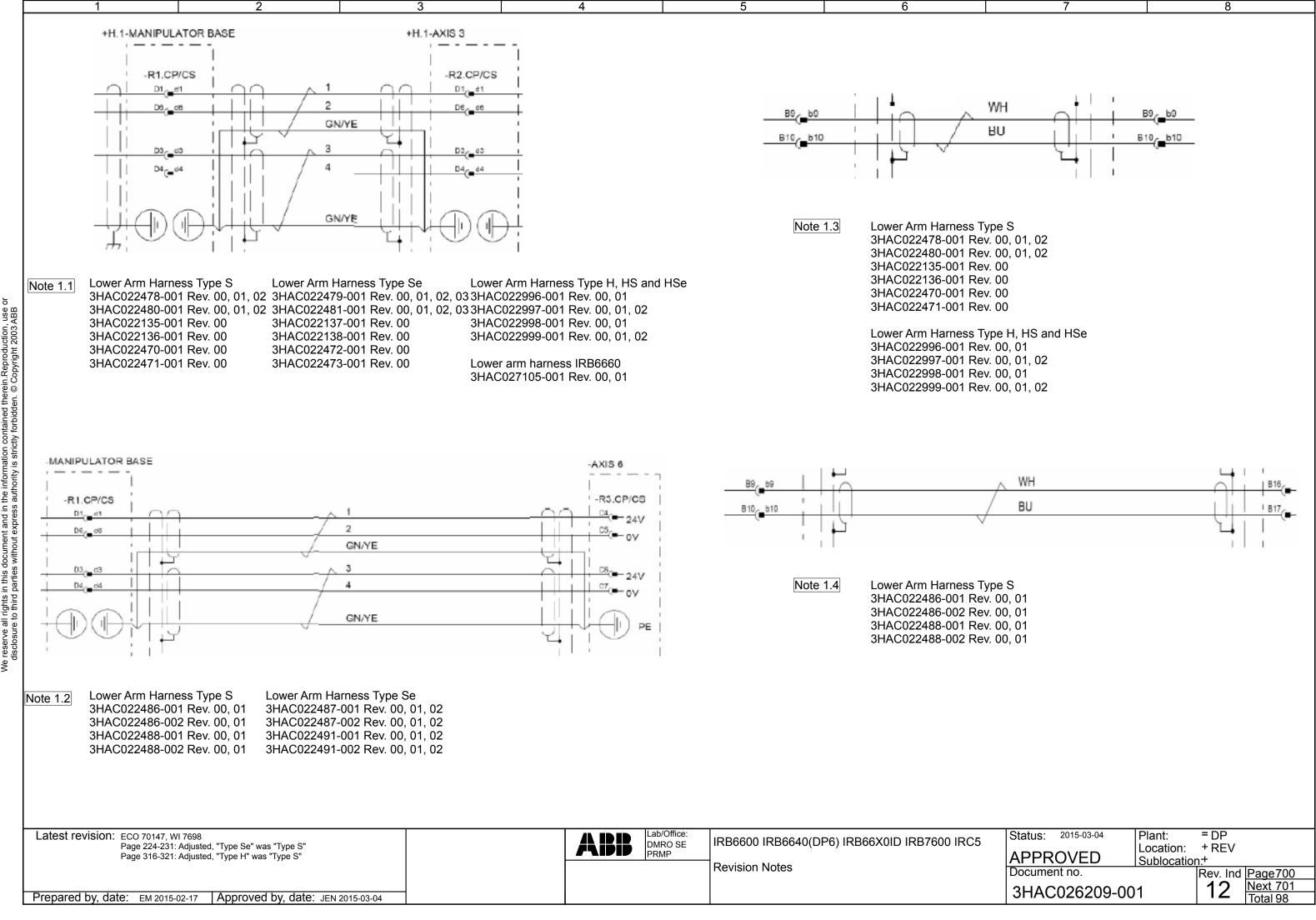


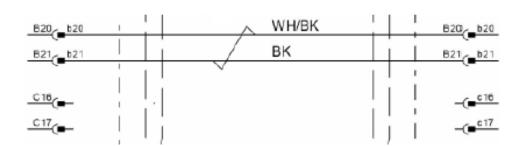






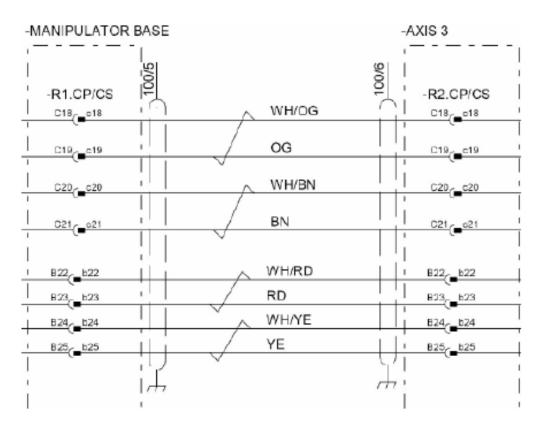






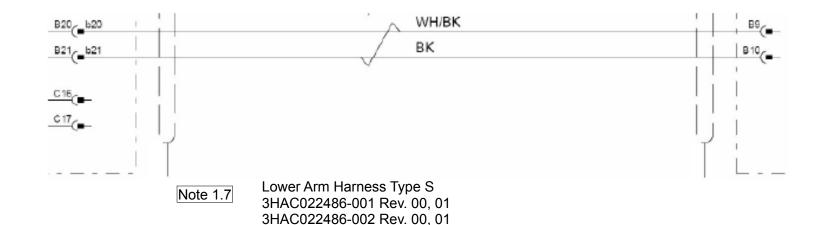
Note 1.5 Lower Arm Harness Type S 3HAC022478-001 Rev. 00, 01, 02 3HAC022135-001 Rev. 00 3HAC022136-001 Rev. 00

Lower Arm Harness Type H, HS and HSe 3HAC022996-001 Rev. 00, 01 3HAC022997-001 Rev. 00, 01, 02

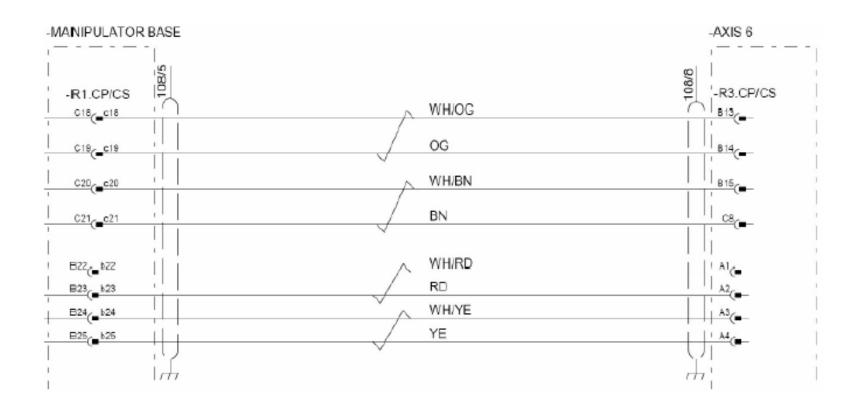


Note 1.6 Lower Arm Harness Type S 3HAC022478-001 Rev.00, 01, 02 3HAC022135-001 Rev. 00 3HAC022136-001 Rev. 00

Lower Arm Harness Type H, HS and HSe 3HAC022996-001 Rev. 00, 01 3HAC022997-001 Rev. 00, 01, 02



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Note 1.8 Lower Arm Harness Type S 3HAC022486-001 Rev. 00, 01 3HAC022486-002 Rev. 00, 01

Latest revision: ECO 70147, WI 7698 Page 224-231: Adjusted, "Ty Page 316-321: Adjusted, "Ty	ype H" was "Type S"
Prepared by, date: EM 2015-02-17   Ap	pproved by, date: JEN 2015-03-04

ABB Lab/Office: DMRO SE PRMP

IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5

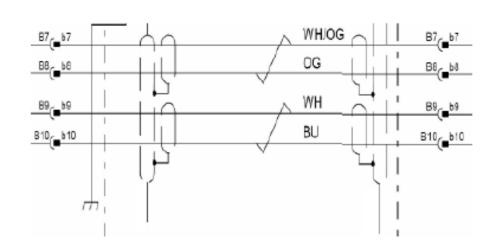
Revision Notes

APPROVED Document no.

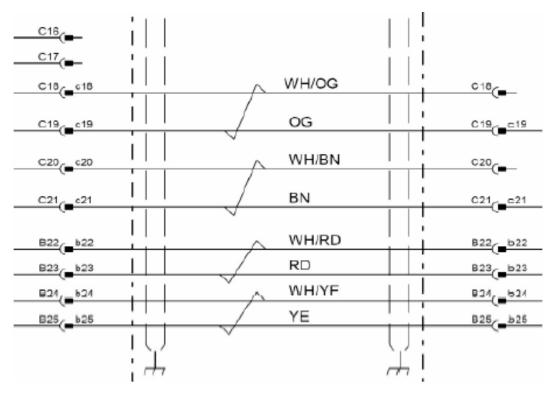
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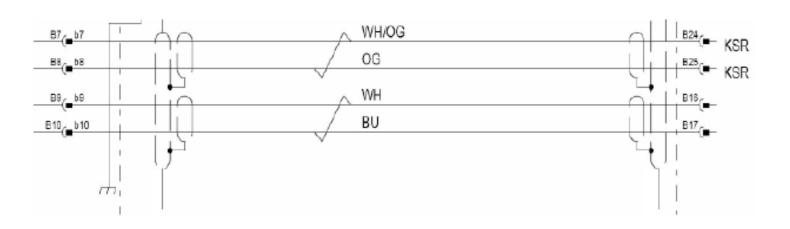


Note 1.9 Lower Arm Harness Type Se Lower Arm Harness IRB6660 3HAC022479-001 Rev. 00, 01, 02, 03 3HAC027105-001 Rev. 00,01 3HAC022481-001 Rev. 00, 01, 02, 03 3HAC022137-001 Rev. 00 3HAC022138-001 Rev. 00 3HAC022472-001 Rev. 00

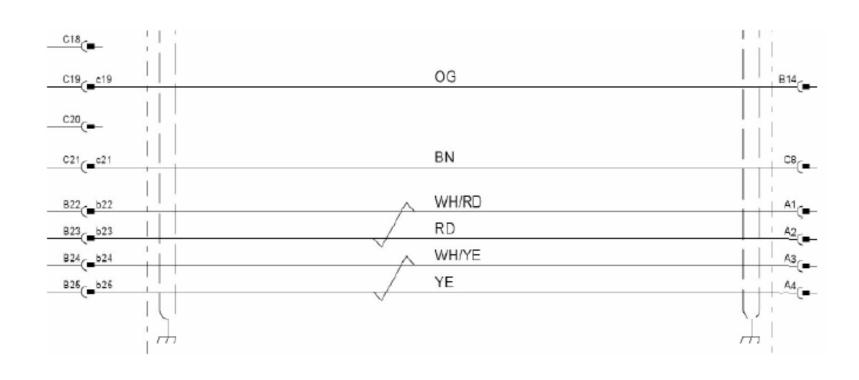


Note 1.10 Lower Arm Harness Type Se 3HAC022479-001 Rev. 00, 01, 02, 03 3HAC022137-001 Rev. 00 3HAC022138-001 Rev. 00

3HAC022473-001 Rev. 00



Note 1.11 Lower Arm Harness Type Se 3HAC022487-001 Rev. 00, 01, 02 3HAC022487-002 Rev. 00, 01, 02 3HAC022491-001 Rev. 00, 01, 02 3HAC022491-002 Rev. 00, 01, 02



Note 1.12 Lower Arm Harness Type Se 3HAC022487-001 Rev. 00, 01, 02 3HAC022487-002 Rev. 00, 01, 02

Latest revision: ECO 70147, WI 7698 Page 224-231: Adjusted, "Type Se" was "Type S" Page 316-321: Adjusted, "Type H" was "Type S" Prepared by, date: EM 2015-02-17 | Approved by, date: JEN 2015-03-04

Lab/Office DMRO SE

IRB6600 IRB6640(DP6) IRB66X0ID IRB7600 IRC5

Status: 2015-03-04 **APPROVED** 

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