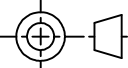
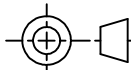
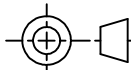
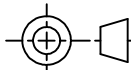
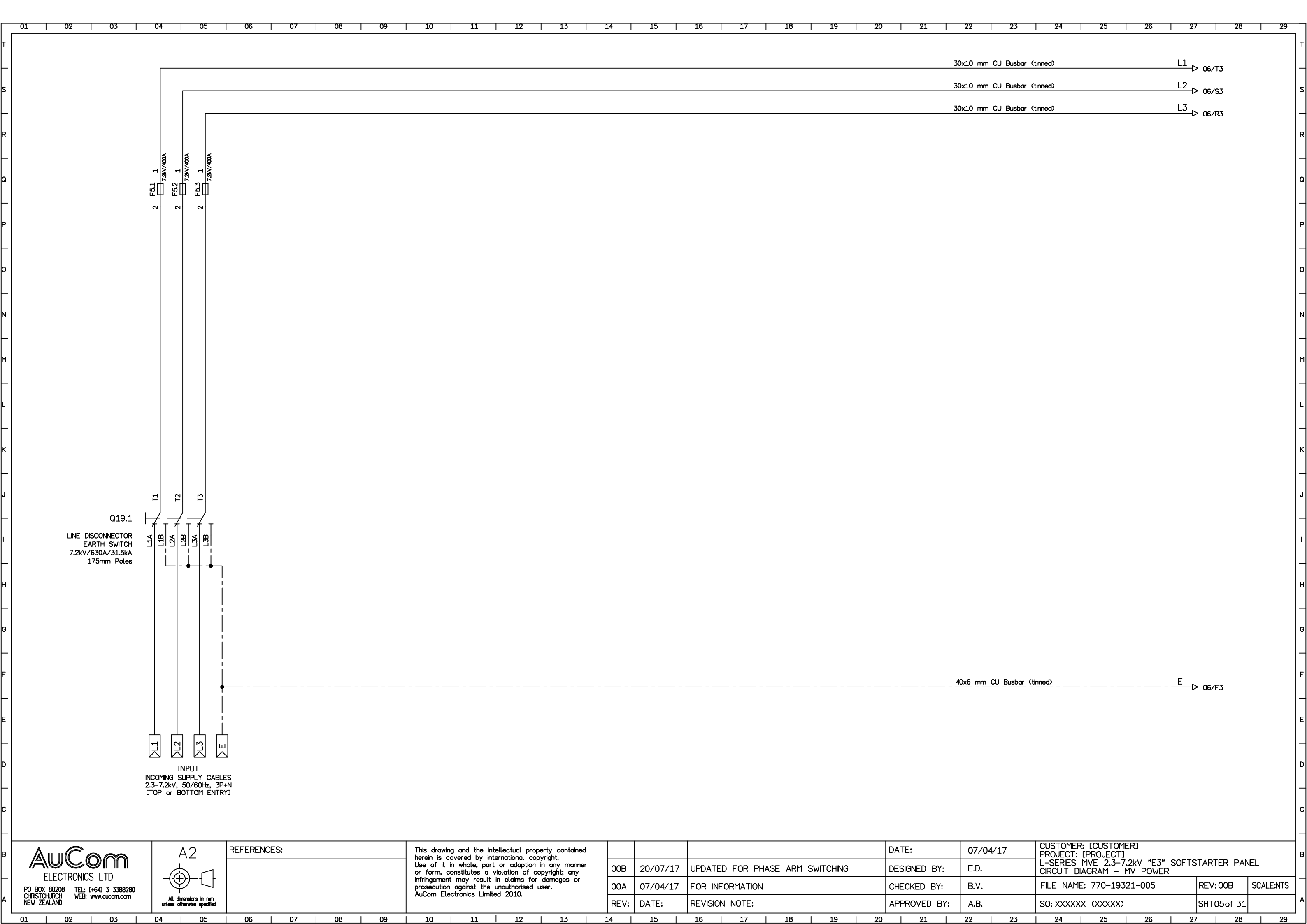


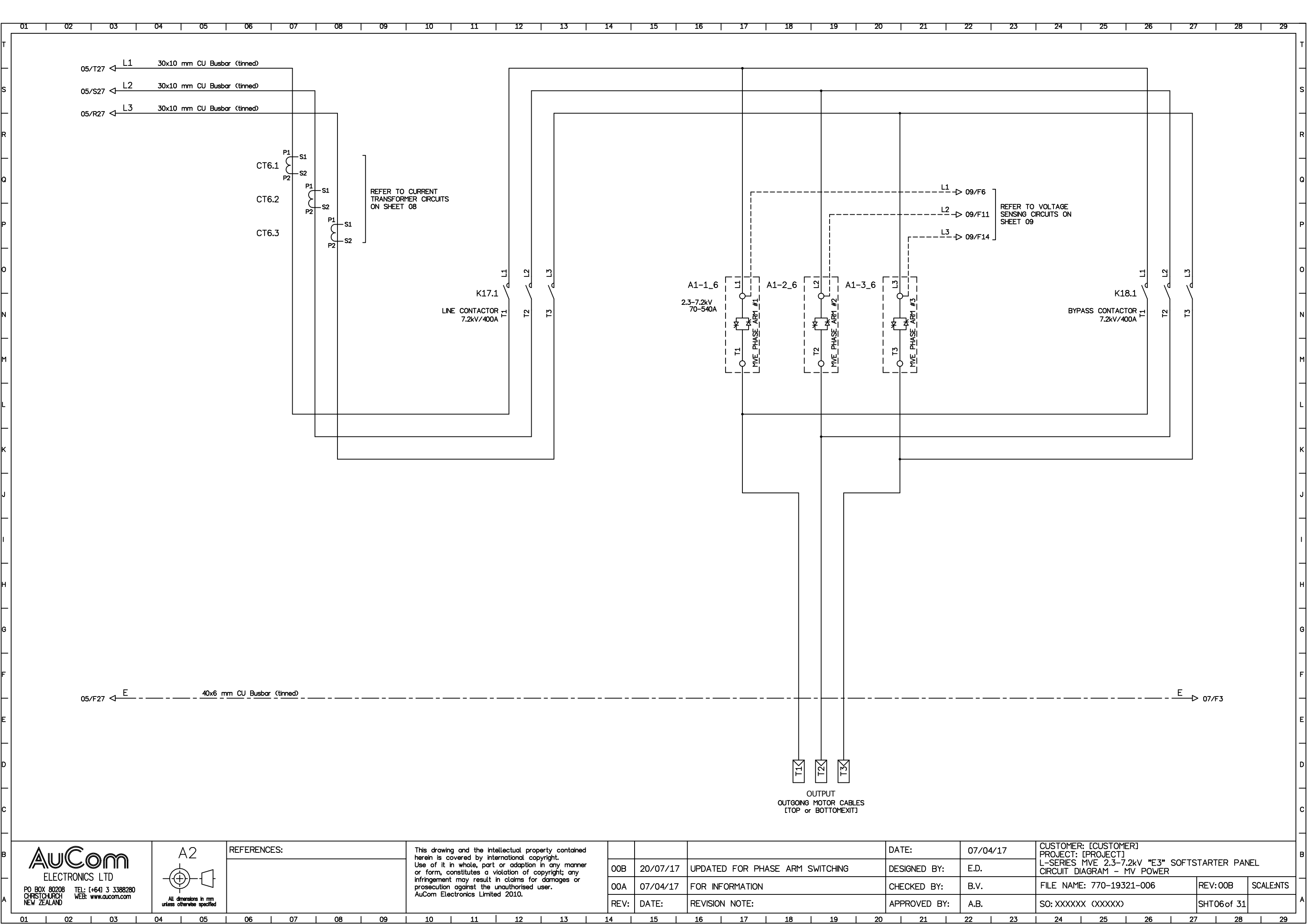
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29								
T																													T								
S																													S								
R																													R								
Q																													Q								
P																													P								
O																													O								
N																													N								
M																													M								
L																													L								
K																													K								
J																													J								
I																													I								
H																													H								
G																													G								
F																													F								
E																													E								
D																													D								
C																													C								
B																													B								
A																													A								
AuCom ELECTRONICS LTD PO BOX 80208 CHRISTCHURCH NEW ZEALAND TEL: [+64] 3 3388280 WEB: www.aucom.com					A2  All dimensions in mm unless otherwise specified					REFERENCES:					This drawing and the intellectual property contained herein is covered by international copyright. Use of it in whole, part or adaption in any manner or form, constitutes a violation of copyright; any infringement may result in claims for damages or prosecution against the unauthorised user. AuCom Electronics Limited 2010.					00B		20/07/17		UPDATED FOR PHASE ARM SWITCHING				DESIGNED BY:		E.D.		CUSTOMER: [CUSTOMER] PROJECT: [PROJECT] L-SERIES MVE 2.3-7.2kV "E3" SOFTSTARTER PANEL COVER SHEET					
															00A		07/04/17		FOR INFORMATION				CHECKED BY:		B.V.		FILE NAME: 770-19321-001				REV:00B		SCALE:NTS				
															REV:		DATE:		REVISION NOTE:				APPROVED BY:		A.B.		SO: XXXXXX (XXXXX)				SHT01 of 31						
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29								

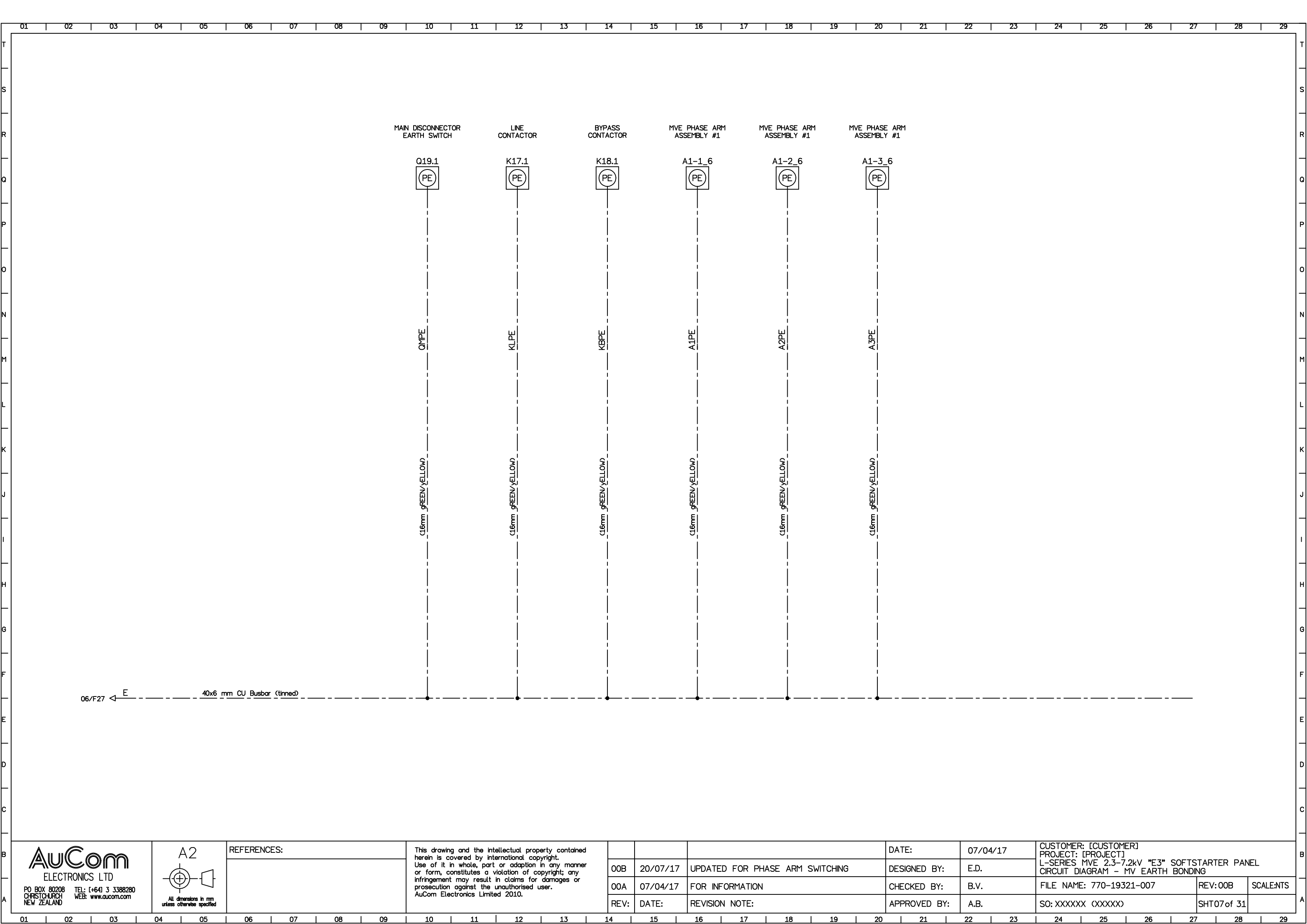
GENERAL TECHNICAL DATA

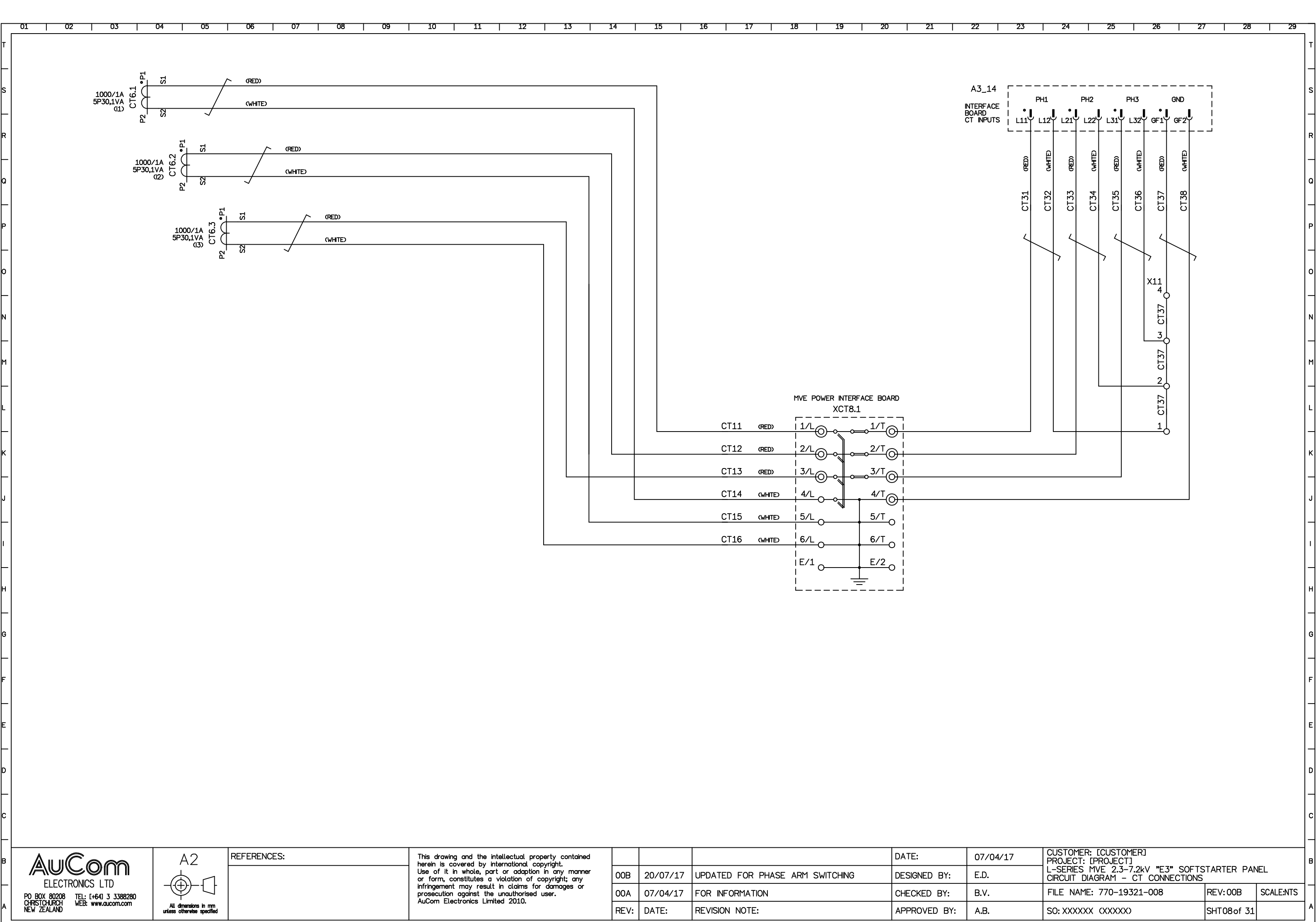
Rated voltage (Ur):	7.2 kV
Nominal operating voltage (Un):	7.2 kV
Network type:	TN-C
Rated frequency (fr):	50 Hz
Rated power frequency withstand voltage (Ud):	20 kV
Rated impulse lightning withstand voltage (Up):	60 kV
Rated nominal current (Ir):	200 A
Rated busbar current (Ib):	400 A
Rated short-time withstand current (Ik-tk):	20-31.5 kA / 1 s
Rated peak withstand current (Ip):	63 kA
Loss of service continuity:	LSC2
Partition class:	PM
Control voltage - main (Uc):	230 VAC (+10%/-15%)
Control voltage - auxiliary (Uaux):	230 VAC (+10%/-15%)
Degree of protection:	IP 54
Panel colour:	RAL 7035
Panel dimensions (HxWxD mm):	[TBC]
Weight:	1000 kg
Operating temperature:	- 5 to + 50 degrees celcius
Altitude:	< 1000 m
Humidity:	95 % non-condensing
MV supply cable entry:	Bottom or Top
MV motor cable exit:	Bottom or Top
LV control cable entry:	Bottom or Top

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29																																																																																												
<table><tr><th>CONDUCTOR FUNCTION</th><th>CONDUCTOR SIZE</th><th>CONDUCTOR TYPE</th><th>CONDUCTOR COLOUR</th></tr><tr><td>MV - L1 (3 phase)</td><td>30 x 10 mm</td><td>CU busbar</td><td>Tinned</td></tr><tr><td>MV - L2 (3 phase)</td><td>30 x 10 mm</td><td>CU busbar</td><td>Tinned</td></tr><tr><td>MV - L3 (3 phase)</td><td>30 x 10 mm</td><td>CU busbar</td><td>Tinned</td></tr><tr><td>E (MV system earth)</td><td>40 x 6 mm</td><td>CU busbar</td><td>Tinned</td></tr><tr><td>LV - L1 (3 phase)</td><td>1.5 to 4.0 mm ²</td><td>H07 V-K</td><td>Brown (Bn)</td></tr><tr><td>LV - L2 (3 phase)</td><td>1.5 to 4.0 mm ²</td><td>H07 V-K</td><td>Black (Bk)</td></tr><tr><td>LV - L3 (3 phase)</td><td>1.5 to 4.0 mm ²</td><td>H07 V-K</td><td>Grey (Gy)</td></tr><tr><td>LV - N (3 phase)</td><td>1.5 to 4.0 mm ²</td><td>H07 V-K</td><td>Blue (Bu)</td></tr><tr><td>CT circuits</td><td>1.5 to 4.0 mm ² (twisted pair)</td><td>H07 V-K</td><td>Red/White (Rd =S1 [k] / Wh =S2 [l])</td></tr><tr><td>L 110 - 230 VAC (1 phase)</td><td>1.5 mm ²</td><td>H07 V-K</td><td>Red (Rd)</td></tr><tr><td>N 110 - 230 VAC (1 phase)</td><td>1.5 mm ²</td><td>H07 V-K</td><td>Red (Rd)</td></tr><tr><td>L 24 VAC (1 phase)</td><td>1.5 mm ²</td><td>H07 V-K</td><td>Brown (Bn)</td></tr><tr><td>N 24 VAC (1 phase)</td><td>1.5 mm ²</td><td>H07 V-K</td><td>Brown (Bn)</td></tr><tr><td>DC + (24 - 30 V)</td><td>1.5 mm ²</td><td>H07 V-K</td><td>Blue (Bu)</td></tr><tr><td>DC - (24 - 30 V)</td><td>1.5 mm ²</td><td>H07 V-K</td><td>Blue (Bu)</td></tr><tr><td>DC + (48 - 220 V)</td><td>1.5 mm ²</td><td>H07 V-K</td><td>Grey (Gy)</td></tr><tr><td>DC - (48 - 220 V)</td><td>1.5 mm ²</td><td>H07 V-K</td><td>Grey (Gy)</td></tr><tr><td>PE (LV protective earth)</td><td>1.5 mm ²</td><td>H07 V-K</td><td>Green/Yellow (Gn/Ye)</td></tr><tr><td>PE (MV protective earth)</td><td>16 mm ²</td><td>H07 V-K</td><td>Green/Yellow (Gn/Ye)</td></tr><tr><td>External control circuits</td><td>1.5 mm ²</td><td>H07 V-K</td><td>Orange (Or)</td></tr><tr><td>Analog circuits</td><td>1.5 mm ²</td><td>H07 V-K</td><td>Blue (Bu)</td></tr><tr><td>Zero potential circuits</td><td>1.5 mm ²</td><td>H07 V-K</td><td>White (Wh)</td></tr></table>																													CONDUCTOR FUNCTION	CONDUCTOR SIZE	CONDUCTOR TYPE	CONDUCTOR COLOUR	MV - L1 (3 phase)	30 x 10 mm	CU busbar	Tinned	MV - L2 (3 phase)	30 x 10 mm	CU busbar	Tinned	MV - L3 (3 phase)	30 x 10 mm	CU busbar	Tinned	E (MV system earth)	40 x 6 mm	CU busbar	Tinned	LV - L1 (3 phase)	1.5 to 4.0 mm ²	H07 V-K	Brown (Bn)	LV - L2 (3 phase)	1.5 to 4.0 mm ²	H07 V-K	Black (Bk)	LV - L3 (3 phase)	1.5 to 4.0 mm ²	H07 V-K	Grey (Gy)	LV - N (3 phase)	1.5 to 4.0 mm ²	H07 V-K	Blue (Bu)	CT circuits	1.5 to 4.0 mm ² (twisted pair)	H07 V-K	Red/White (Rd =S1 [k] / Wh =S2 [l])	L 110 - 230 VAC (1 phase)	1.5 mm ²	H07 V-K	Red (Rd)	N 110 - 230 VAC (1 phase)	1.5 mm ²	H07 V-K	Red (Rd)	L 24 VAC (1 phase)	1.5 mm ²	H07 V-K	Brown (Bn)	N 24 VAC (1 phase)	1.5 mm ²	H07 V-K	Brown (Bn)	DC + (24 - 30 V)	1.5 mm ²	H07 V-K	Blue (Bu)	DC - (24 - 30 V)	1.5 mm ²	H07 V-K	Blue (Bu)	DC + (48 - 220 V)	1.5 mm ²	H07 V-K	Grey (Gy)	DC - (48 - 220 V)	1.5 mm ²	H07 V-K	Grey (Gy)	PE (LV protective earth)	1.5 mm ²	H07 V-K	Green/Yellow (Gn/Ye)	PE (MV protective earth)	16 mm ²	H07 V-K	Green/Yellow (Gn/Ye)	External control circuits	1.5 mm ²	H07 V-K	Orange (Or)	Analog circuits	1.5 mm ²	H07 V-K	Blue (Bu)	Zero potential circuits	1.5 mm ²	H07 V-K	White (Wh)
CONDUCTOR FUNCTION	CONDUCTOR SIZE	CONDUCTOR TYPE	CONDUCTOR COLOUR																																																																																																																					
MV - L1 (3 phase)	30 x 10 mm	CU busbar	Tinned																																																																																																																					
MV - L2 (3 phase)	30 x 10 mm	CU busbar	Tinned																																																																																																																					
MV - L3 (3 phase)	30 x 10 mm	CU busbar	Tinned																																																																																																																					
E (MV system earth)	40 x 6 mm	CU busbar	Tinned																																																																																																																					
LV - L1 (3 phase)	1.5 to 4.0 mm ²	H07 V-K	Brown (Bn)																																																																																																																					
LV - L2 (3 phase)	1.5 to 4.0 mm ²	H07 V-K	Black (Bk)																																																																																																																					
LV - L3 (3 phase)	1.5 to 4.0 mm ²	H07 V-K	Grey (Gy)																																																																																																																					
LV - N (3 phase)	1.5 to 4.0 mm ²	H07 V-K	Blue (Bu)																																																																																																																					
CT circuits	1.5 to 4.0 mm ² (twisted pair)	H07 V-K	Red/White (Rd =S1 [k] / Wh =S2 [l])																																																																																																																					
L 110 - 230 VAC (1 phase)	1.5 mm ²	H07 V-K	Red (Rd)																																																																																																																					
N 110 - 230 VAC (1 phase)	1.5 mm ²	H07 V-K	Red (Rd)																																																																																																																					
L 24 VAC (1 phase)	1.5 mm ²	H07 V-K	Brown (Bn)																																																																																																																					
N 24 VAC (1 phase)	1.5 mm ²	H07 V-K	Brown (Bn)																																																																																																																					
DC + (24 - 30 V)	1.5 mm ²	H07 V-K	Blue (Bu)																																																																																																																					
DC - (24 - 30 V)	1.5 mm ²	H07 V-K	Blue (Bu)																																																																																																																					
DC + (48 - 220 V)	1.5 mm ²	H07 V-K	Grey (Gy)																																																																																																																					
DC - (48 - 220 V)	1.5 mm ²	H07 V-K	Grey (Gy)																																																																																																																					
PE (LV protective earth)	1.5 mm ²	H07 V-K	Green/Yellow (Gn/Ye)																																																																																																																					
PE (MV protective earth)	16 mm ²	H07 V-K	Green/Yellow (Gn/Ye)																																																																																																																					
External control circuits	1.5 mm ²	H07 V-K	Orange (Or)																																																																																																																					
Analog circuits	1.5 mm ²	H07 V-K	Blue (Bu)																																																																																																																					
Zero potential circuits	1.5 mm ²	H07 V-K	White (Wh)																																																																																																																					
<table><tr><td rowspan="3"> AuCom ELECTRONICS LTD PO BOX 80208 CHRISTCHURCH NEW ZEALAND TEL: [+64] 3 3388280 WEB: www.aucom.com A2  All dimensions in mm unless otherwise specified </td><td>REFERENCES:</td><td rowspan="3"> This drawing and the intellectual property contained herein is covered by international copyright. Use of it in whole, part or adaption in any manner or form, constitutes a violation of copyright; any infringement may result in claims for damages or prosecution against the unauthorised user. AuCom Electronics Limited 2010. </td><td></td><td></td><td></td><td>DATE:</td><td>07/04/17</td><td colspan="3">CUSTOMER: [CUSTOMER] PROJECT: [PROJECT] L-SERIES MVE 2.3–7.2kV "E3" SOFTSTARTER PANEL CONDUCTOR DETAILS</td></tr><tr><td></td><td>00B</td><td>20/07/17</td><td>UPDATED FOR PHASE ARM SWITCHING</td><td>DESIGNED BY:</td><td>E.D.</td><td colspan="3">FILE NAME: 770–19321–003</td><td>REV:00B</td><td>SCALE:NTS</td></tr><tr><td></td><td>00A</td><td>07/04/17</td><td>FOR INFORMATION</td><td>CHECKED BY:</td><td>B.V.</td><td colspan="3">SO: XXXXXX (XXXXX)</td><td>SHT03 of 31</td><td></td></tr><tr><td></td><td>REV:</td><td>DATE:</td><td>REVISION NOTE:</td><td>APPROVED BY:</td><td>A.B.</td><td colspan="3"></td><td colspan="3"></td></tr></table>																													AuCom ELECTRONICS LTD PO BOX 80208 CHRISTCHURCH NEW ZEALAND TEL: [+64] 3 3388280 WEB: www.aucom.com A2  All dimensions in mm unless otherwise specified	REFERENCES:	This drawing and the intellectual property contained herein is covered by international copyright. Use of it in whole, part or adaption in any manner or form, constitutes a violation of copyright; any infringement may result in claims for damages or prosecution against the unauthorised user. AuCom Electronics Limited 2010.				DATE:	07/04/17	CUSTOMER: [CUSTOMER] PROJECT: [PROJECT] L-SERIES MVE 2.3–7.2kV "E3" SOFTSTARTER PANEL CONDUCTOR DETAILS				00B	20/07/17	UPDATED FOR PHASE ARM SWITCHING	DESIGNED BY:	E.D.	FILE NAME: 770–19321–003			REV:00B	SCALE:NTS		00A	07/04/17	FOR INFORMATION	CHECKED BY:	B.V.	SO: XXXXXX (XXXXX)			SHT03 of 31			REV:	DATE:	REVISION NOTE:	APPROVED BY:	A.B.																																																					
AuCom ELECTRONICS LTD PO BOX 80208 CHRISTCHURCH NEW ZEALAND TEL: [+64] 3 3388280 WEB: www.aucom.com A2  All dimensions in mm unless otherwise specified	REFERENCES:	This drawing and the intellectual property contained herein is covered by international copyright. Use of it in whole, part or adaption in any manner or form, constitutes a violation of copyright; any infringement may result in claims for damages or prosecution against the unauthorised user. AuCom Electronics Limited 2010.				DATE:	07/04/17	CUSTOMER: [CUSTOMER] PROJECT: [PROJECT] L-SERIES MVE 2.3–7.2kV "E3" SOFTSTARTER PANEL CONDUCTOR DETAILS																																																																																																																
			00B	20/07/17	UPDATED FOR PHASE ARM SWITCHING	DESIGNED BY:	E.D.	FILE NAME: 770–19321–003			REV:00B	SCALE:NTS																																																																																																												
			00A	07/04/17	FOR INFORMATION	CHECKED BY:	B.V.	SO: XXXXXX (XXXXX)			SHT03 of 31																																																																																																													
	REV:	DATE:	REVISION NOTE:	APPROVED BY:	A.B.																																																																																																																			

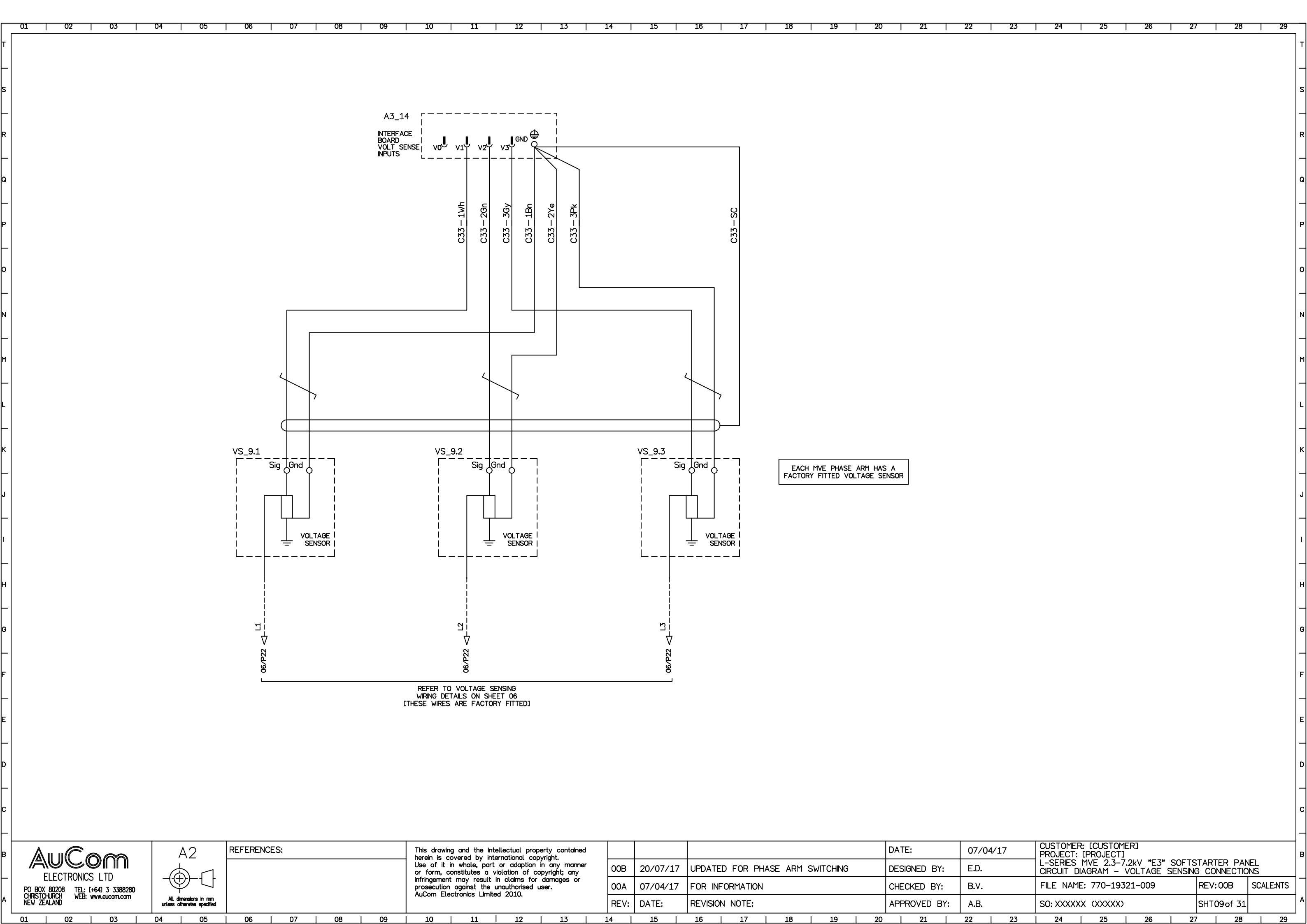








00B	20/07/17	UPDATED FOR PHASE ARM SWITCHING	DATE:	07/04/17	CUSTOMER: [CUSTOMER] PROJECT: [PROJECT] L-SERIES MVE 2.3-7.2kV "E3" SOFTSTARTER PANEL CIRCUIT DIAGRAM - CT CONNECTIONS		
00A	07/04/17	FOR INFORMATION	DESIGNED BY:	E.D.	FILE NAME: 770-19321-008	REV:00B	SCALE:NTS
REV:	DATE:	REVISION NOTE:	CHECKED BY:	B.V.	SO: XXXXXX (XXXXX)	SHT08 of 31	
			APPROVED BY:	A.B.			

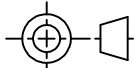


AuCom
ELECTRONICS LTD

PO BOX 80208
CHRISTCHURCH
NEW ZEALAND

TEL: [+64] 3 3388280
WEB: www.aucom.com

A2

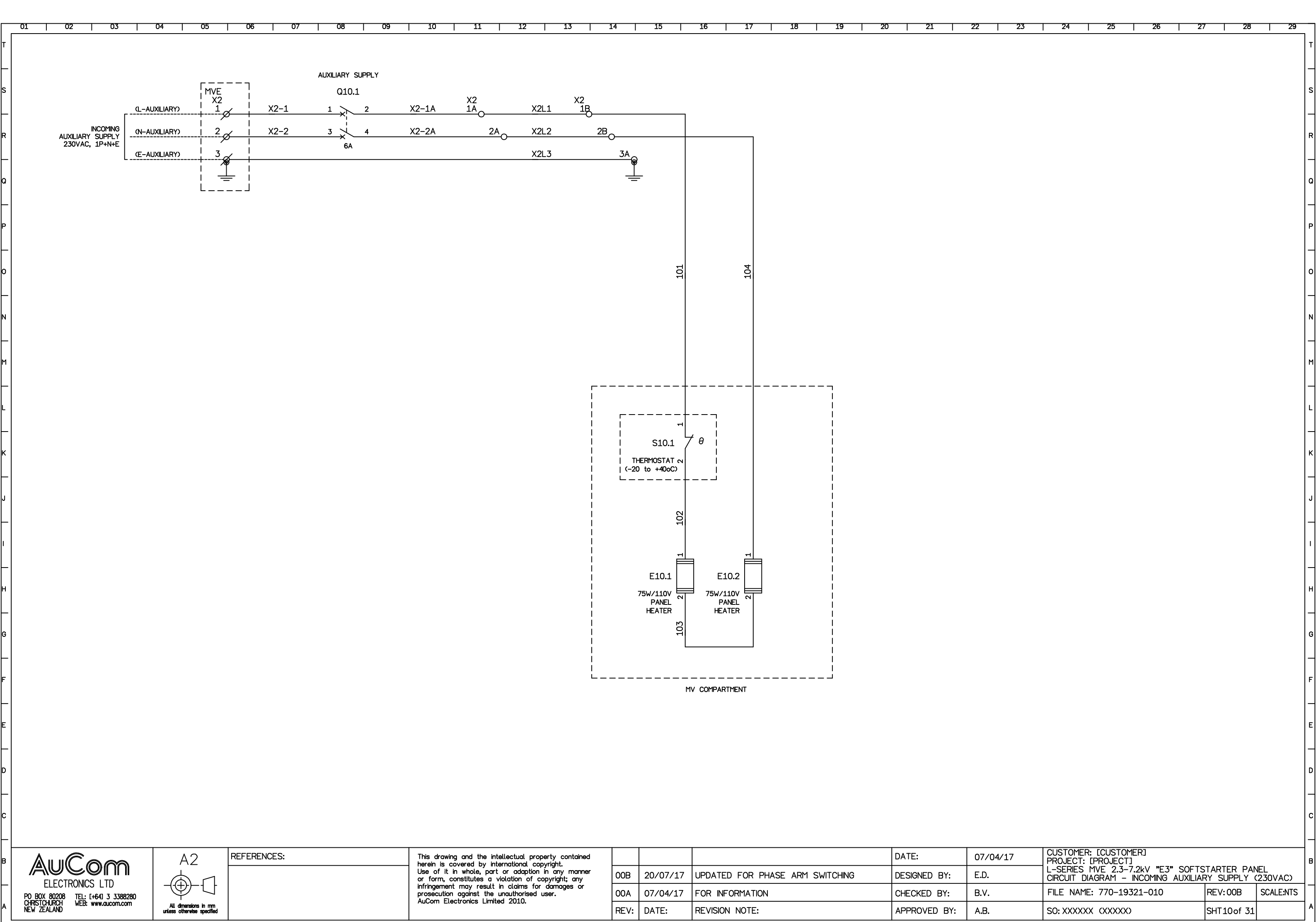


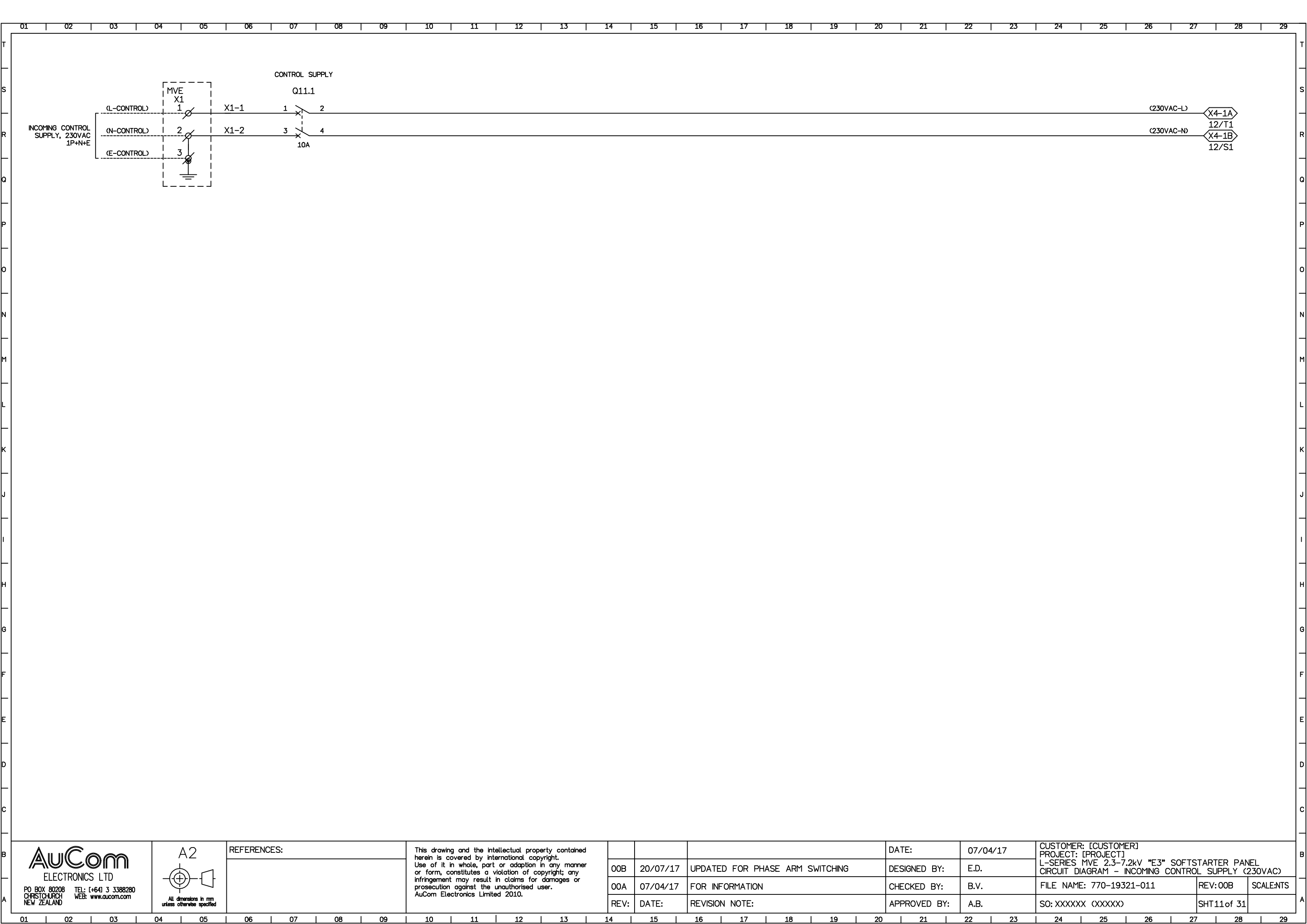
All dimensions in mm
unless otherwise specified

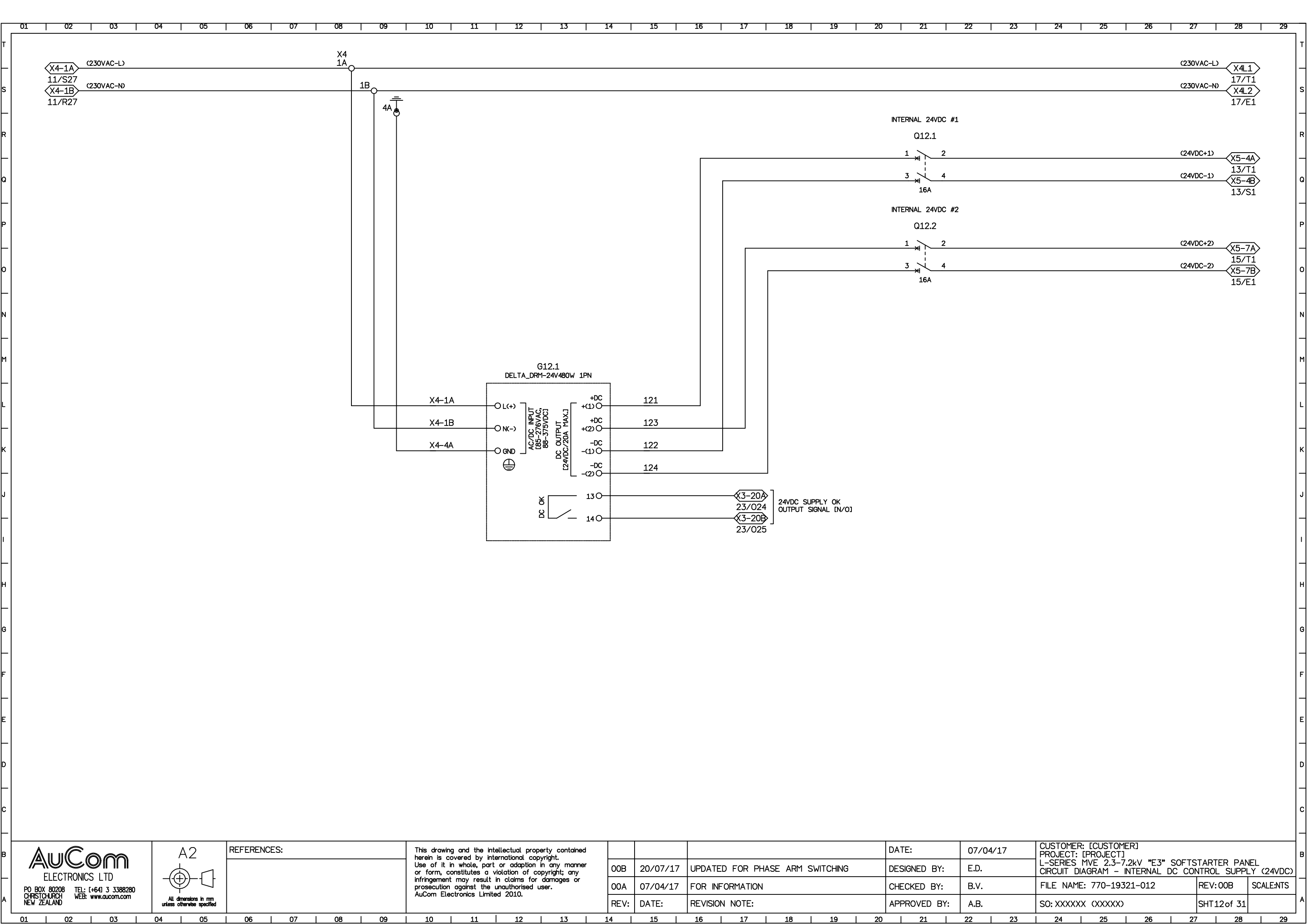
REFERENCES:

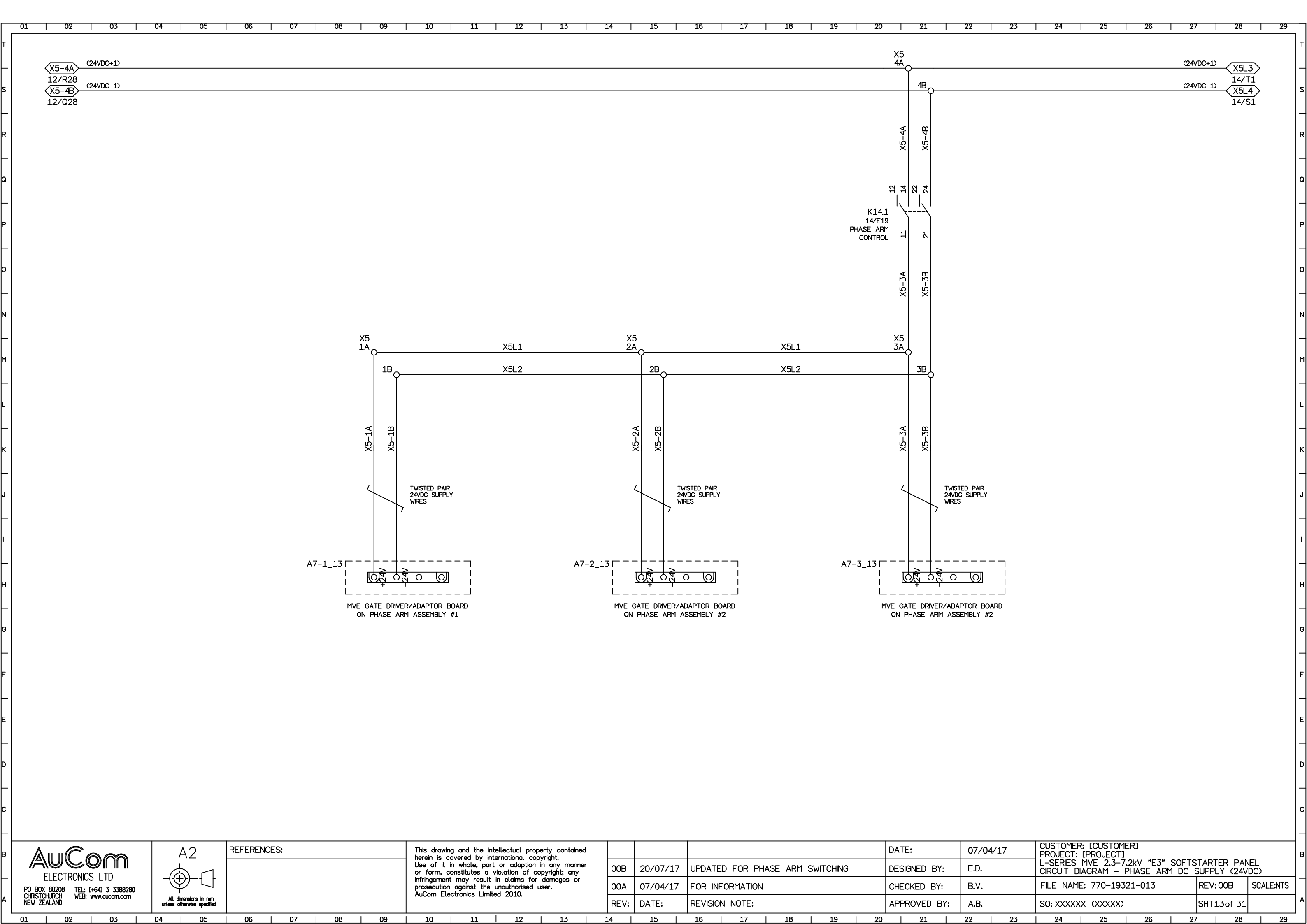
This drawing and the intellectual property contained herein is covered by international copyright. Use of it in whole, part or adaption in any manner or form, constitutes a violation of copyright; any infringement may result in claims for damages or prosecution against the unauthorised user. AuCom Electronics Limited 2010.

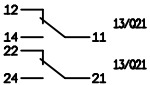
			DATE:	07/04/17	CUSTOMER: [CUSTOMER] PROJECT: [PROJECT] L-SERIES MVE 2.3-7.2kV "E3" SOFTSTARTER PANEL CIRCUIT DIAGRAM - VOLTAGE SENSING CONNECTIONS				
00B	20/07/17	UPDATED FOR PHASE ARM SWITCHING	DESIGNED BY:	E.D.					
00A	07/04/17	FOR INFORMATION	CHECKED BY:	B.V.	FILE NAME: 770-19321-009	REV:00B	SCALE:NTS		
REV:	DATE:	REVISION NOTE:	APPROVED BY:	A.B.	SO: XXXXXX (XXXXX)	SHT09 of 31			

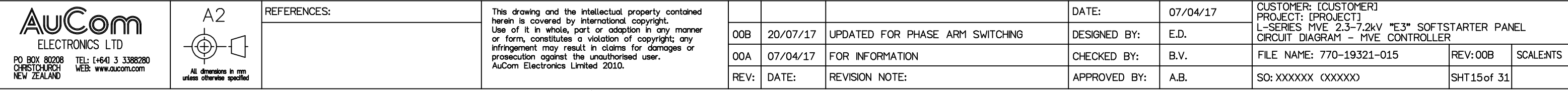


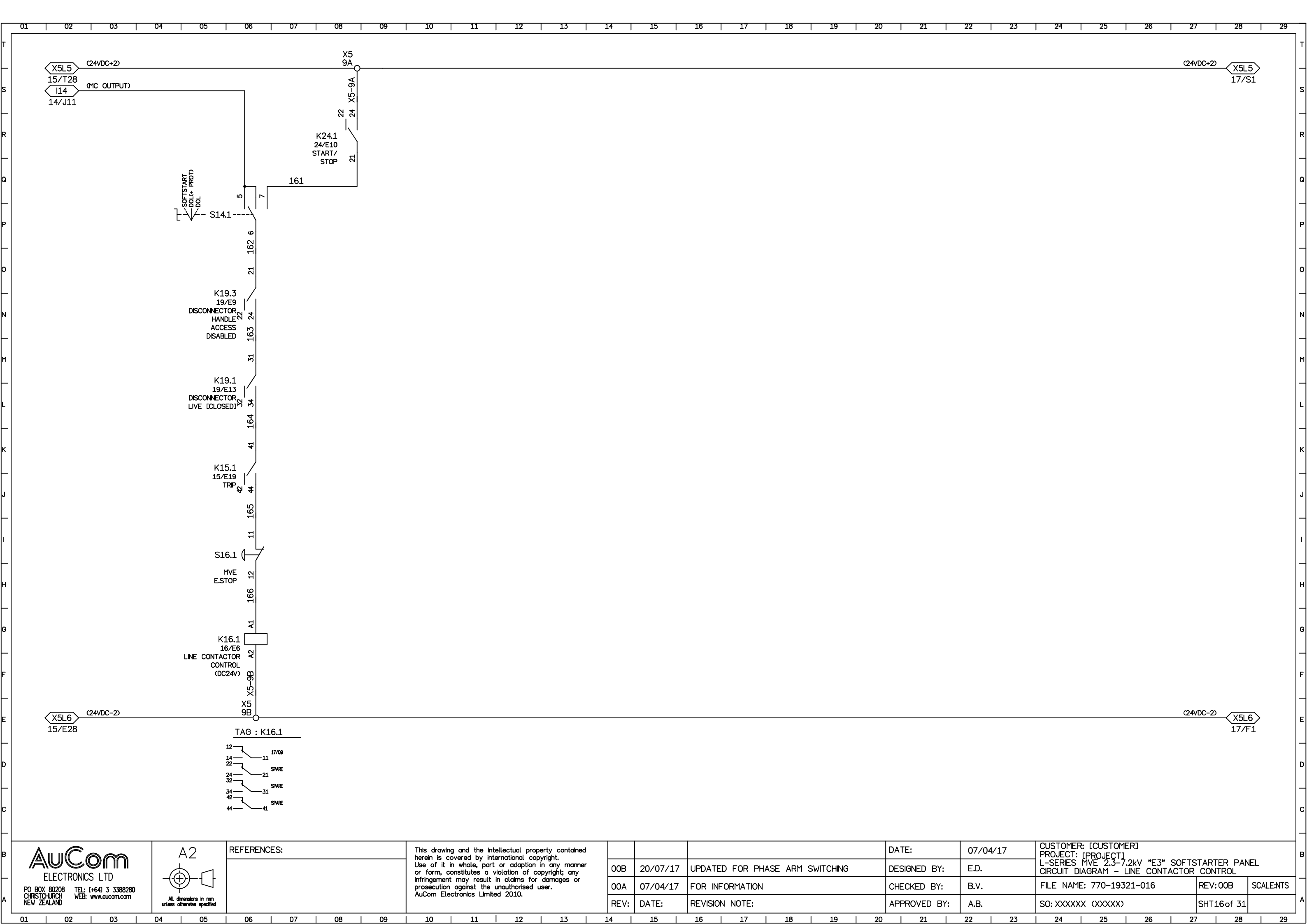


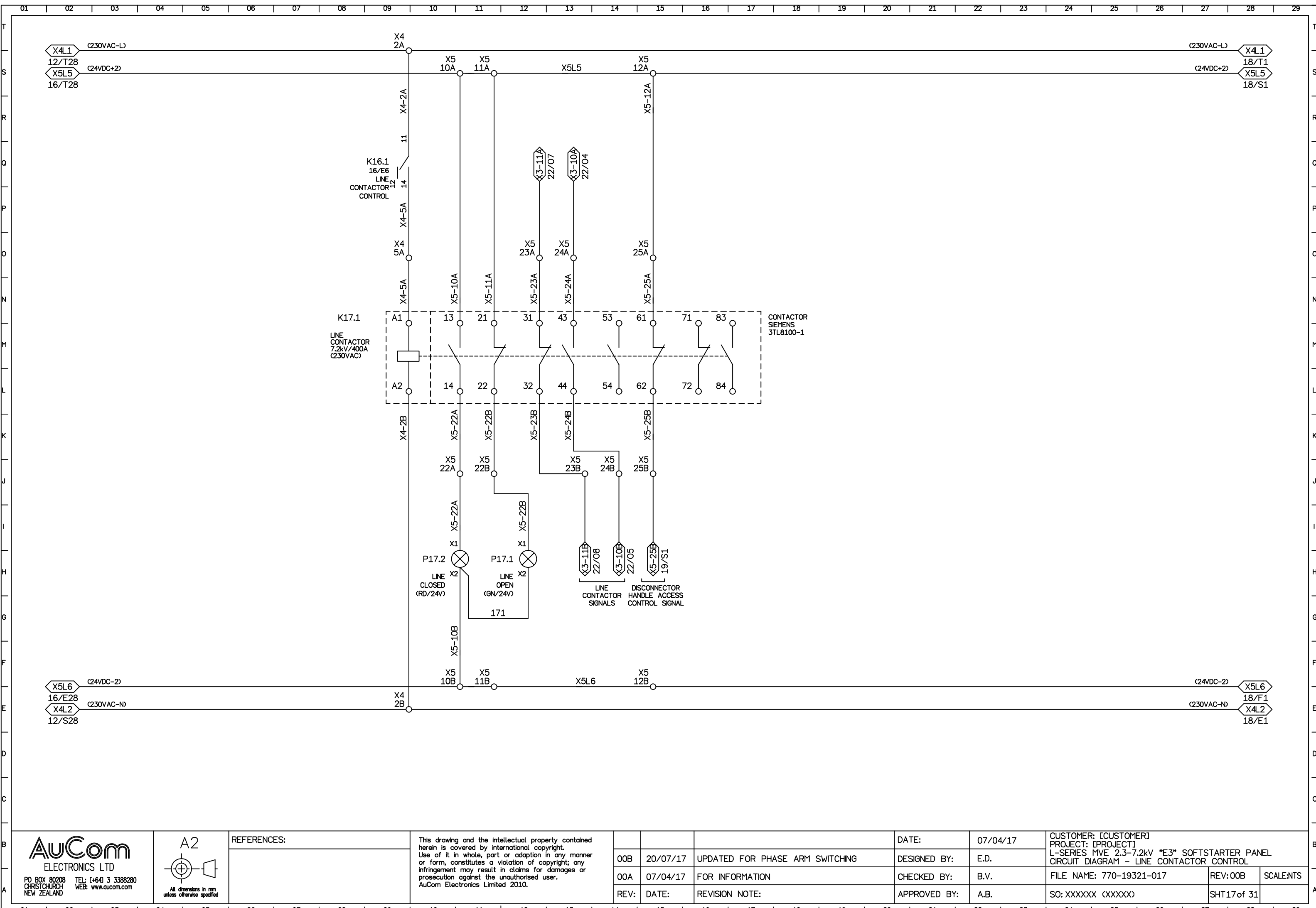




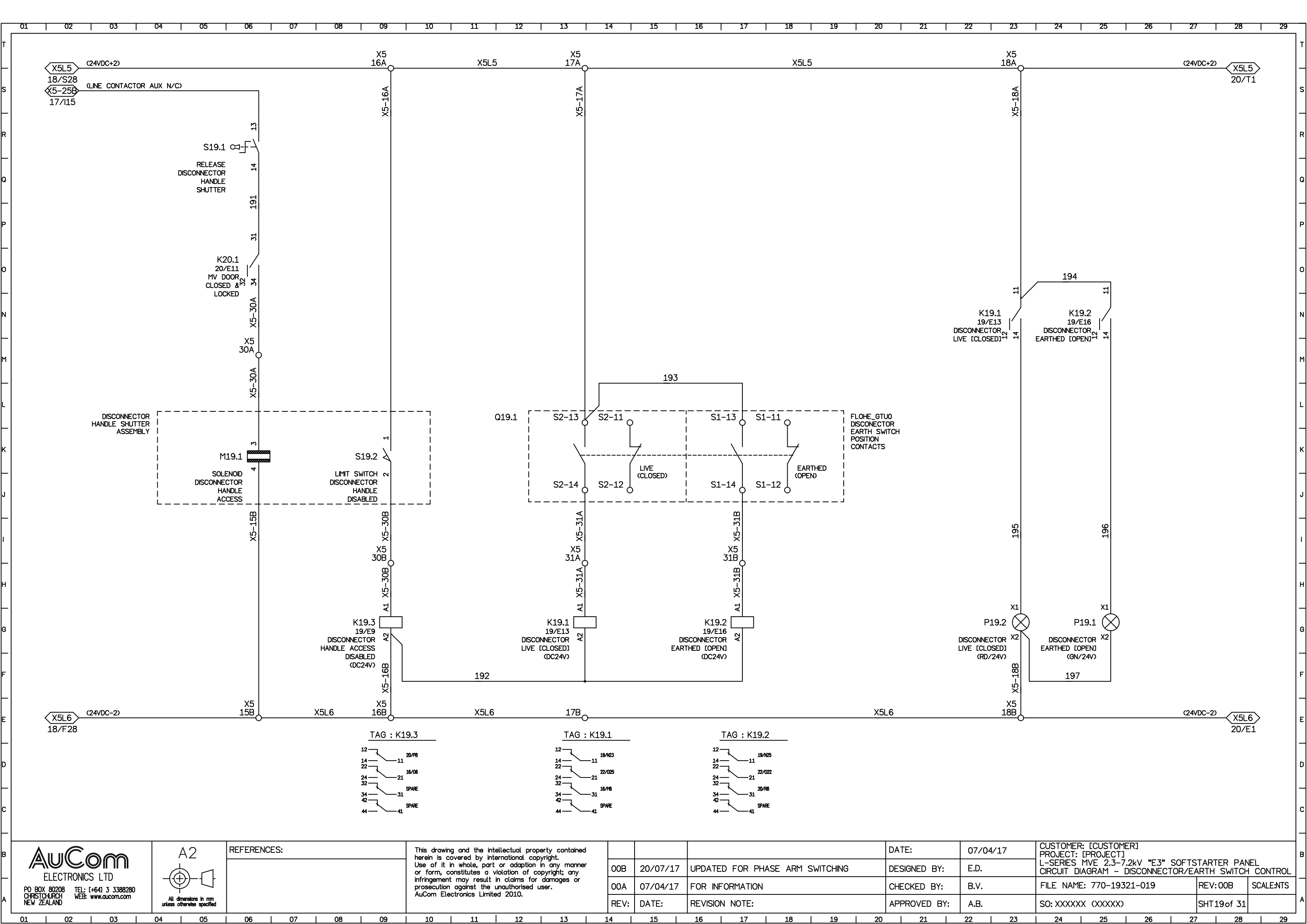










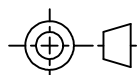


AuCom
ELECTRONICS LTD

PO BOX 80208
CHRISTCHURCH
NEW ZEALAND

TEL: [+64] 3 3388280
WEB: www.aucom.com

A2



All dimensions in mm
unless otherwise specified

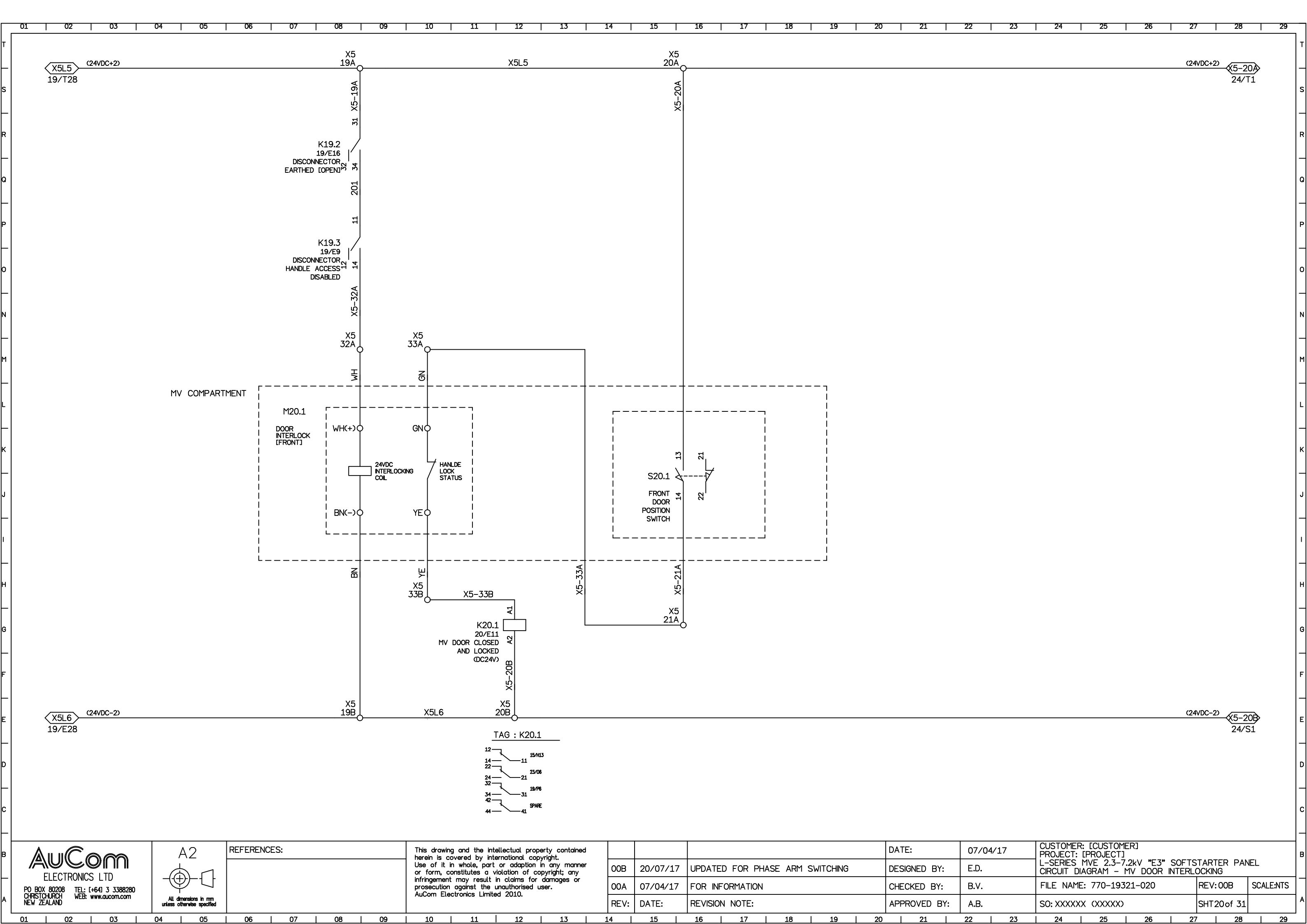
REFERENCES:

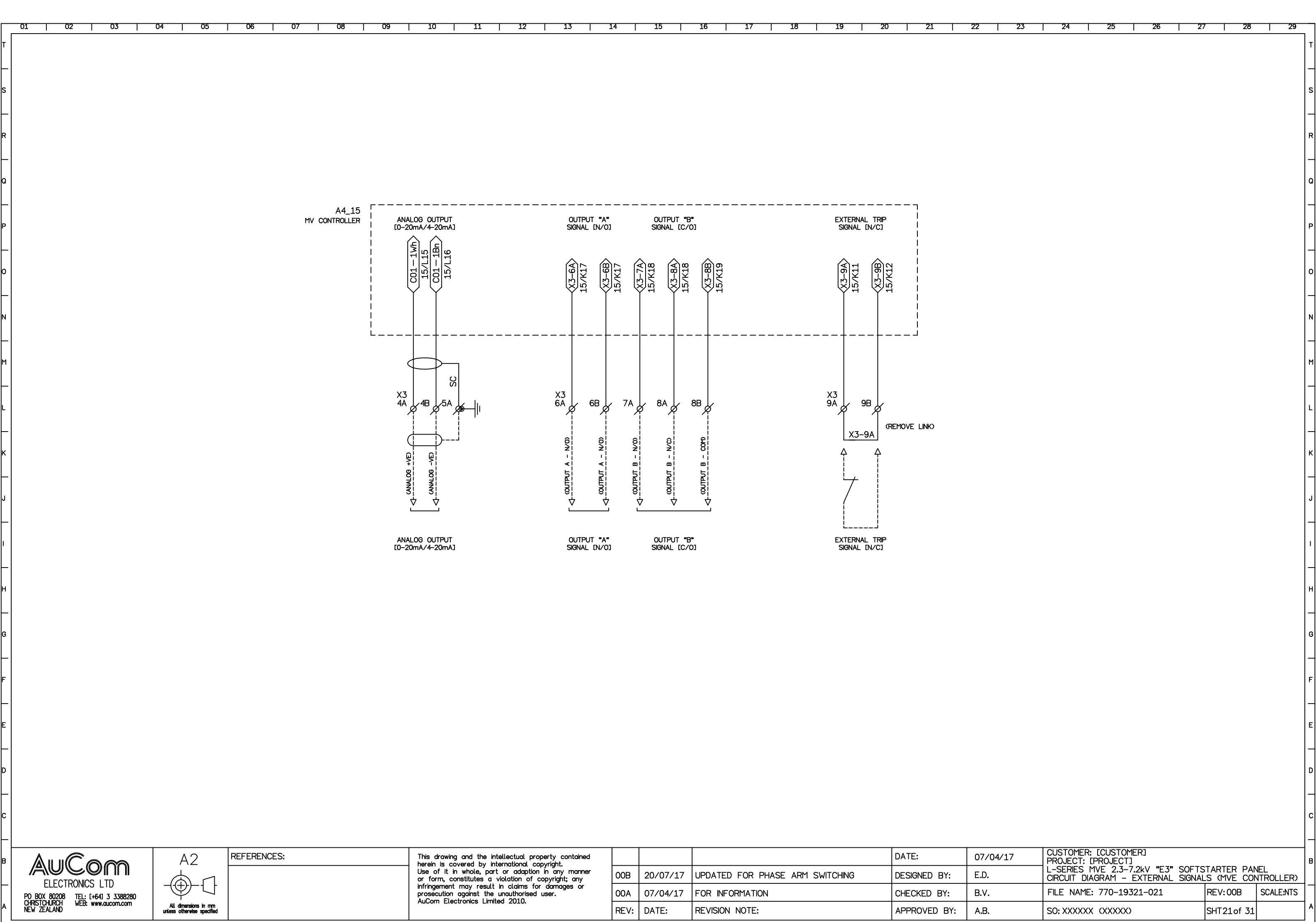
This drawing and the intellectual property contained herein is covered by international copyright. Use of it in whole, part or adaption in any manner or form, constitutes a violation of copyright; any infringement may result in claims for damages or prosecution against the unauthorised user. AuCom Electronics Limited 2010.

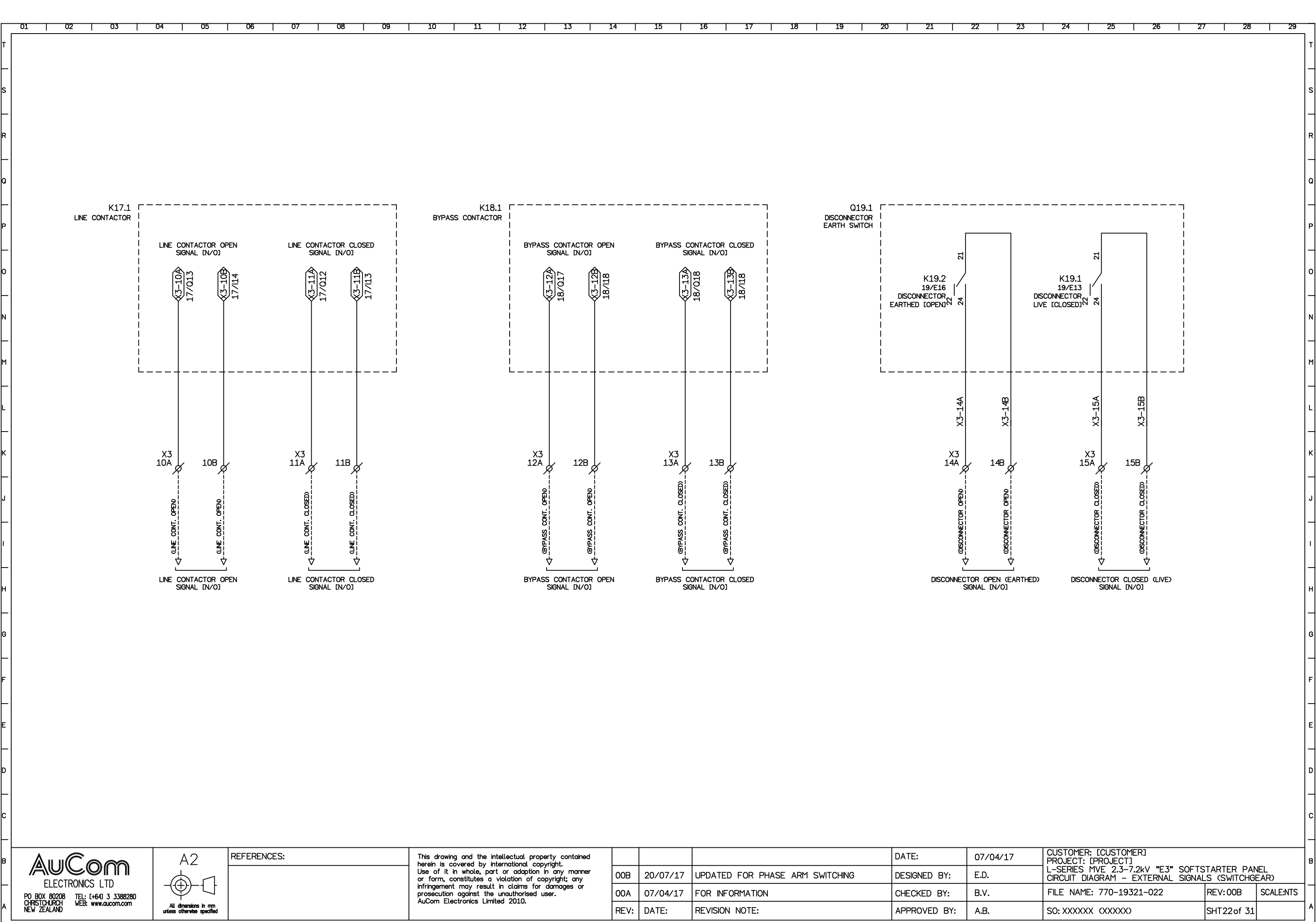
00B	20/07/17	UPDATED FOR PHASE ARM SWITCHING
00A	07/04/17	FOR INFORMATION
REV:	DATE:	REVISION NOTE:

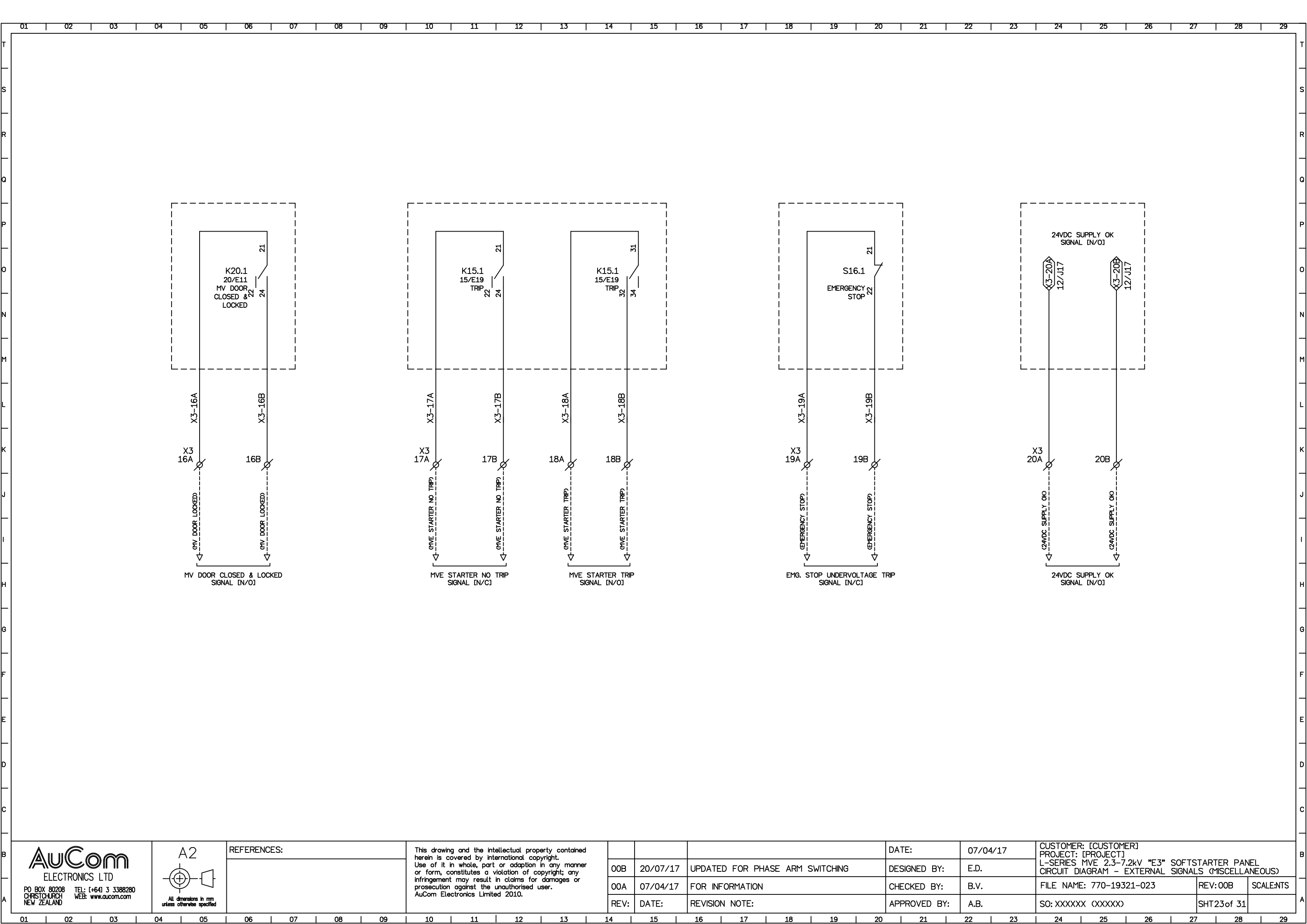
DATE:	07/04/17
DESIGNED BY:	E.D.
CHECKED BY:	B.V.
APPROVED BY:	A.B.

CUSTOMER: [CUSTOMER]		
PROJECT: [PROJECT]		
L-SERIES MVE 2.3-7.2kV "E3" SOFTSTARTER PANEL		
CIRCUIT DIAGRAM - DISCONNECTOR/EARTH SWITCH CONTROL		
FILE NAME: 770-19321-019	REV:00B	SCALE:NTS
SO: XXXXXX (XXXXX)	SHT19 of 31	







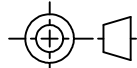


AuCom
ELECTRONICS LTD

PO BOX 80208
CHRISTCHURCH
NEW ZEALAND

TEL: [+64] 3 3388280
WEB: www.aucom.com

A2



All dimensions in mm
unless otherwise specified

REFERENCES:

This drawing and the intellectual property contained herein is covered by international copyright. Use of it in whole, part or adaption in any manner or form, constitutes a violation of copyright; any infringement may result in claims for damages or prosecution against the unauthorised user. AuCom Electronics Limited 2010.

00B

20/07/17

UPDATED FOR PHASE ARM SWITCHING

DATE:

07/04/17

DESIGNED BY:

E.D.

CUSTOMER: [CUSTOMER]
PROJECT: [PROJECT]
L-SERIES MVE 2.3-7.2kV "E3" SOFTSTARTER PANEL
CIRCUIT DIAGRAM - EXTERNAL SIGNALS (MISCELLANEOUS)

00A

07/04/17

FOR INFORMATION

CHECKED BY:

B.V.

FILE NAME: 770-19321-023

REV:00B

SCALE:NTS

REV:

DATE:

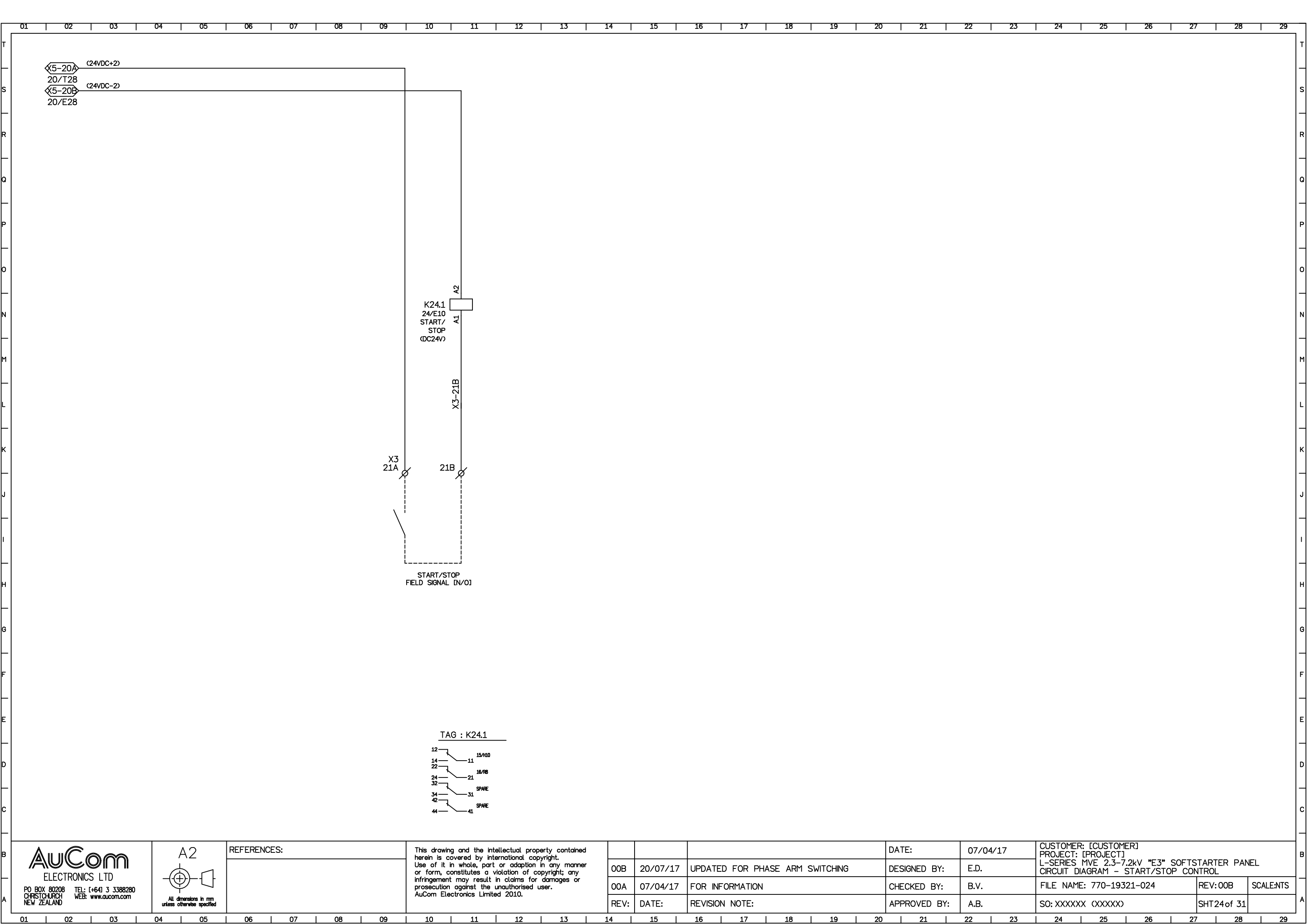
REVISION NOTE:

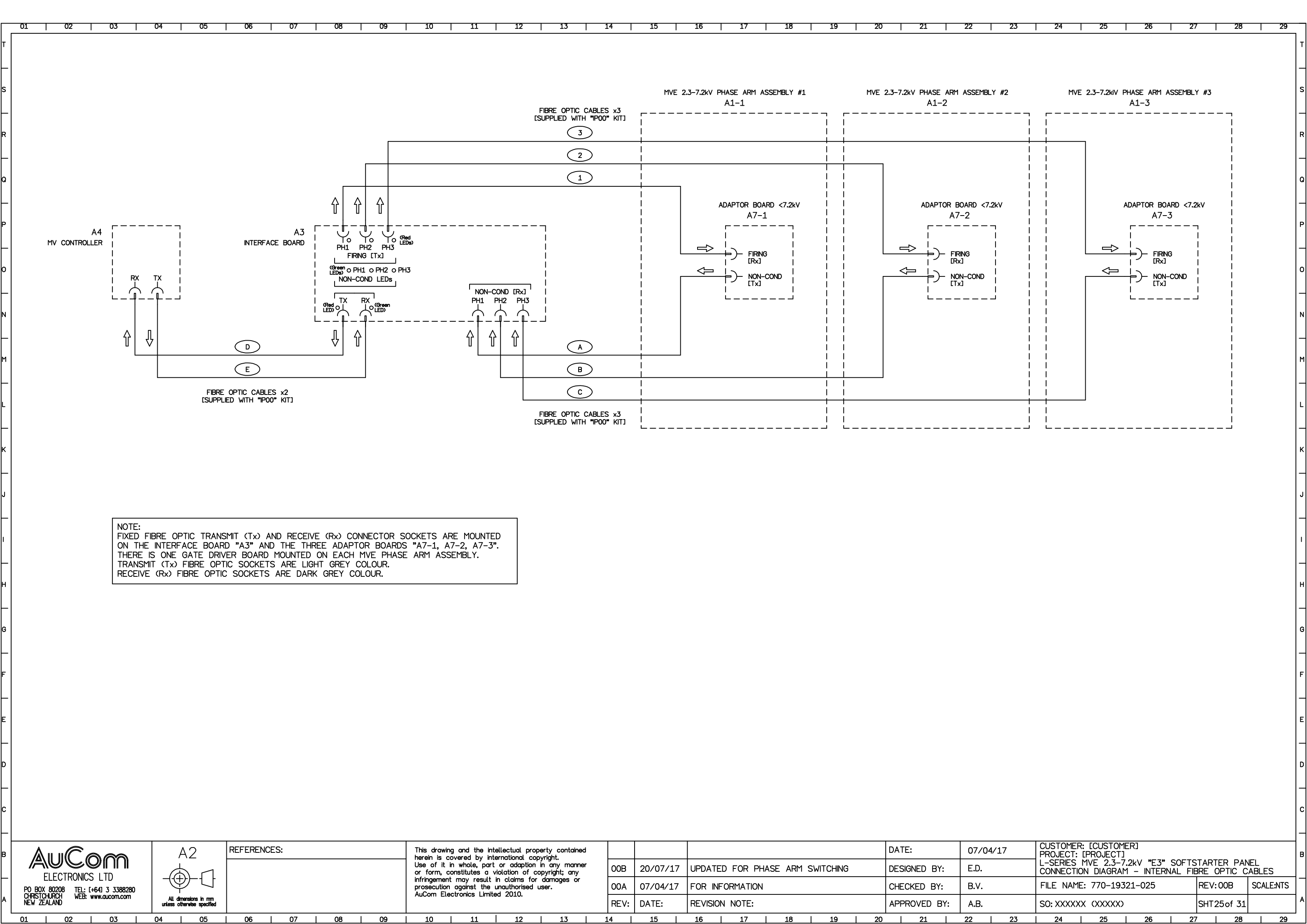
APPROVED BY:

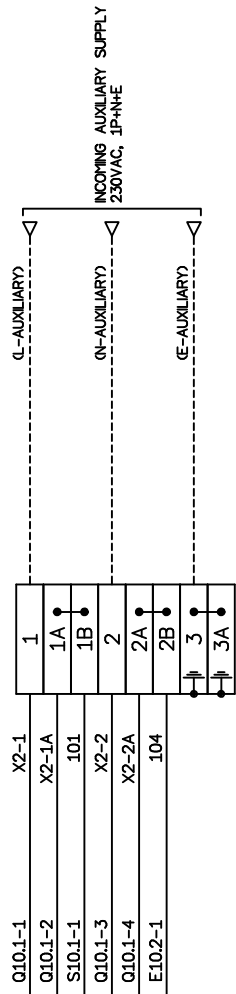
A.B.

SO: XXXXXX (XXXXX)

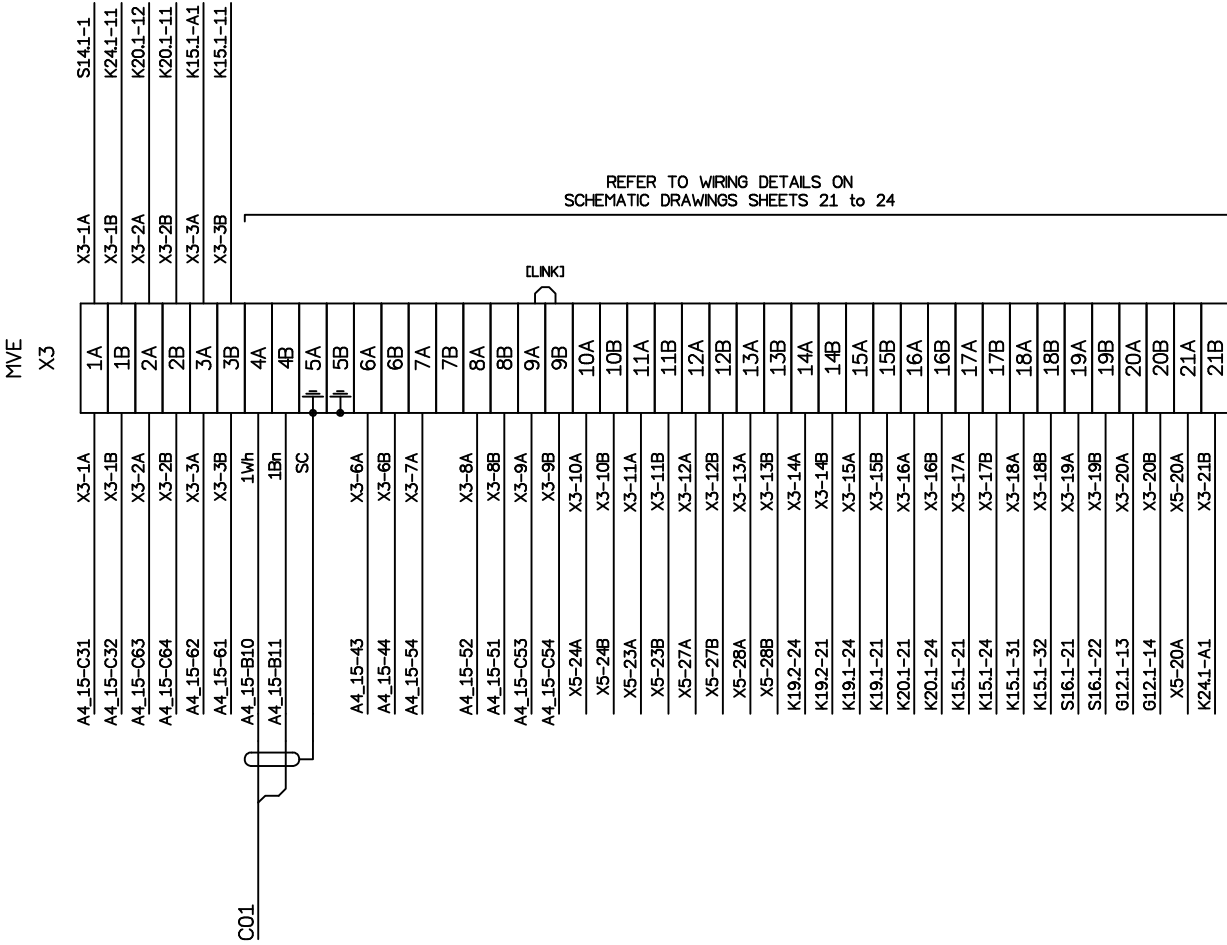
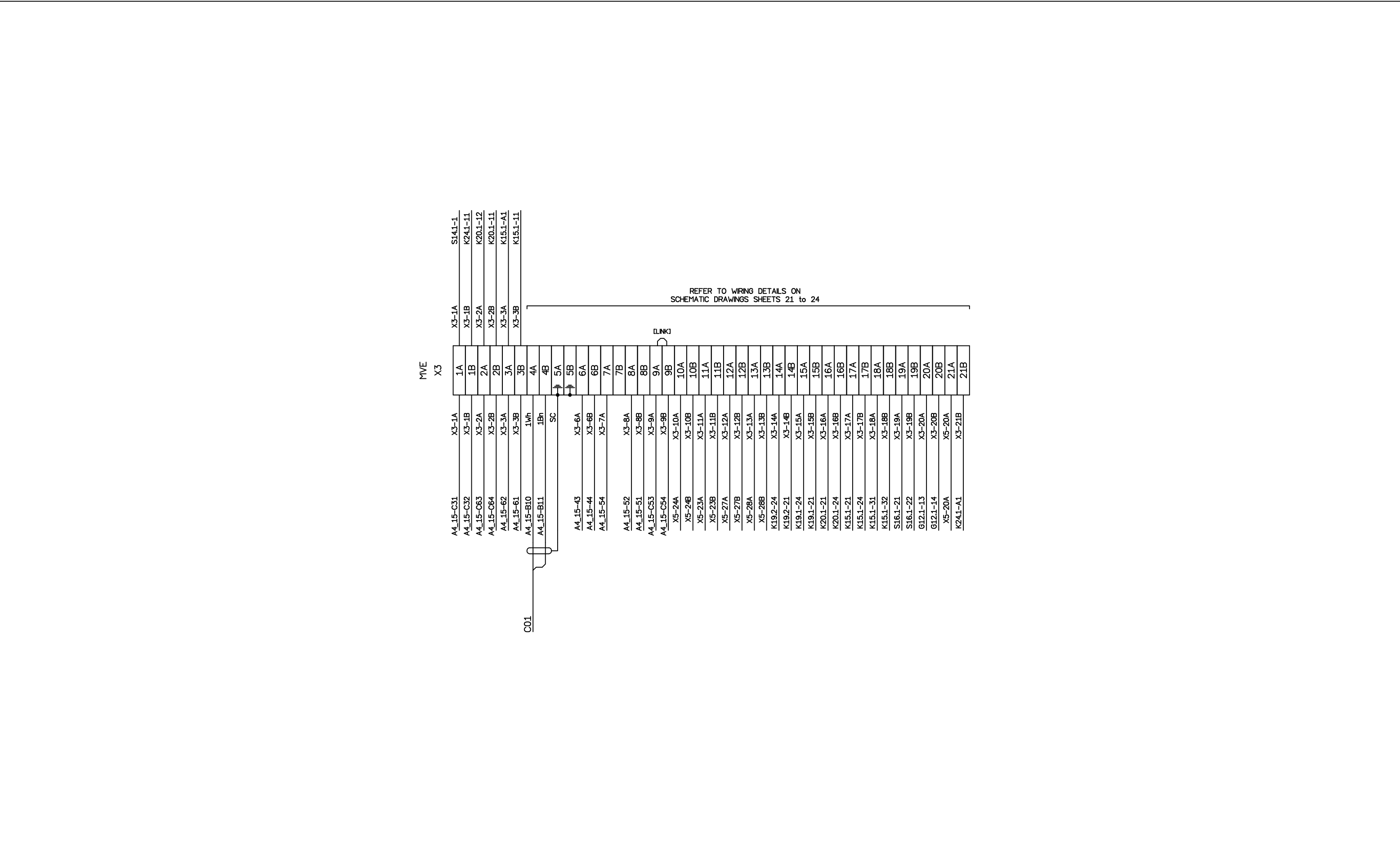
SHT23 of 31







EXTERNAL I/O SIGNALS





01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

