### Robot Palletising Cell:

- Mechanical General Arrangement Drawings
- Electrical Drawings

**GA** Drawings



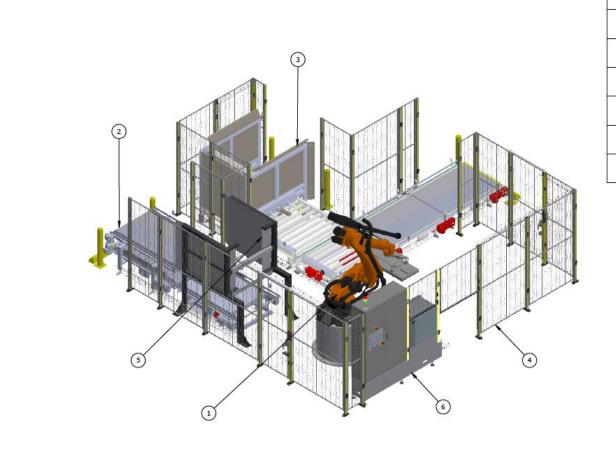
# rawings

## Main Assembly

### ITEM NO. PART NUMBER QTY. Description 1 331-07-01 Palletising Robot 1 2 331-07-02 Layer Pad Conveyor 1 331-07-03 Pail Pallet Conveyor 1 3 331-07-04 Palletising Cell Guarding 5 331-07-05 Layer Pad Conveyor End Stop

Palletising Control Cabinet

331-07-06



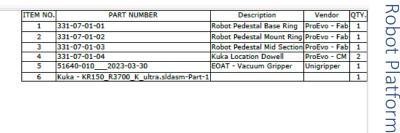
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	DRAWN BY:		DWG NO.: 331-07	
	DATE: 13/04/2023	REVISION NO:	DESCRIPTION:	
	3RD ANGLE PROJECTION	SHEET SIZE: A3	QUANTITY:	
		SCALE:	MATERIAL:	
		DO NOT SCALE	SURFACE TREATMENT:	9
				SHEET 1 C





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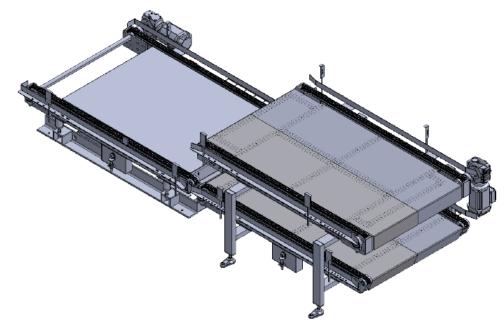
DRAWN BY:		DWG NO.: 331-07-01	
DATE: 13/04/2023	REVISION NO:	DESCRIPTION: Robot Pedestal	
<b>\$</b> —	SHEET SIZE: A3	QUANTITY: 1	
	SCALE:	MATERIAL:	
3RD ANGLE PROJECTION	DO NOT SCALE	SURFACE TREATMENT:	
		SHE	ET1OF1



Layer

Pad





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)	DRAWN BY:		DWG NO.: 331-07-02	
	DATE: 13/04/2023	REVISION NO:	DESCRIPTION: PARTDESC	
	3RD ANGLE PROJECTION	SHEET SIZE: A3	QUANTITY:	
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				SHEET 1 OF





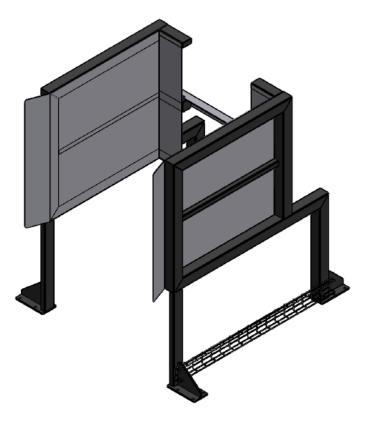
Layer

Pad

Conveyor

End

Stop



ITEM NO.	PART NUMBER	Description	Vendor	QTY.
1	331-07-05-03	Pallet End Stop Cross Brace Lower	ProEvo - CM	1
2	331-07-05-04	Pallet End Stop Cross Brace Upper	ProEvo - CM	1
3	331-07-05-01	Layer Pad End Stop Frame	ProEvo - Fab	1
4	331-07-05-02	End Stop Inner Sheet	ProEvo - SM	2
5	0111	X-Tray U 120x60 Zinc Plated	Axelent	1

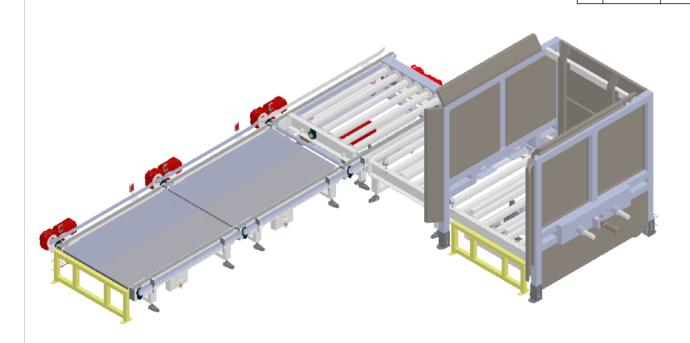


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T	DRAWN BY:		DWG NO.: 331-07-05
	DATE: 13/04/2023	REVISION NO:	DESCRIPTION:
	3RD ANGLE PROJECTION	SHEET SIZE: A3	QUANTITY:
		SCALE:	MATERIAL:
		DO NOT SCALE	SURFACE TREATMENT:
			SHEET 1 OF 1



# Pallet Conveyor/Despense



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LINEAR: ±0.1mm HOLES: ±0.1mm ANGULAR: ±0.5° REMOVE ALL BURRS & SHARP EDGES

•	DRAWN BY:		DWG NO.: 331-07-03	
	DATE: 13/04/2023	REVISION NO:	DESCRIPTION:	
	3RD ANGLE PROJECTION	SHEET SIZE: A3	QUANTITY:	
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				SHEET 1 OF 1

ITEM NO.

1

2

3 0111

4 0111

5 0111

6 0111

8 FAS 5051

PART NUMBER

331-07-03-01

331-07-03-02

7 331-07-03-03

FAS 5055

Description

Pail Pallet Tread Plate LH

Pail Pallet Tread Plate LH

X-Tray U 120x60 Zinc Plated

X-Tray U 120×60 Zinc Plated

X-Tray U 120x60 Zinc Plated

X-Tray U 120x60 Zinc Plated

50x50 Single Sided Fastener Kit

Pail Pallet Conveyor Frame

50x50 Fastener Kit

Vendor

ProEvo - SM

ProEvo - SM

Axelent

Axelent

Axelent

Axelent

Robotunits

Robotunits

Robotunits

QTY.

2

2

1

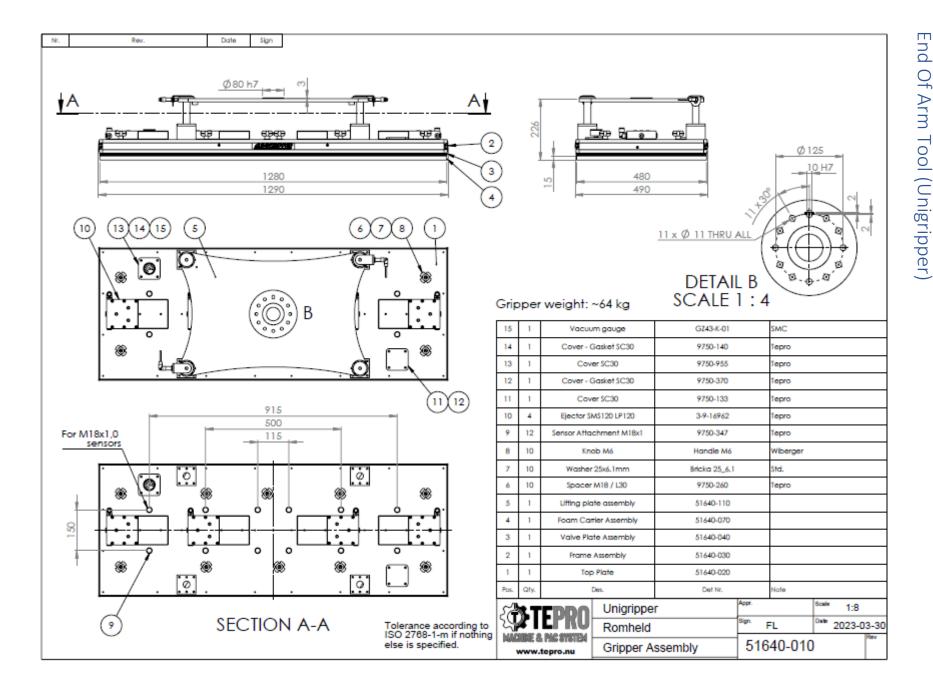
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2 1

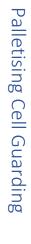
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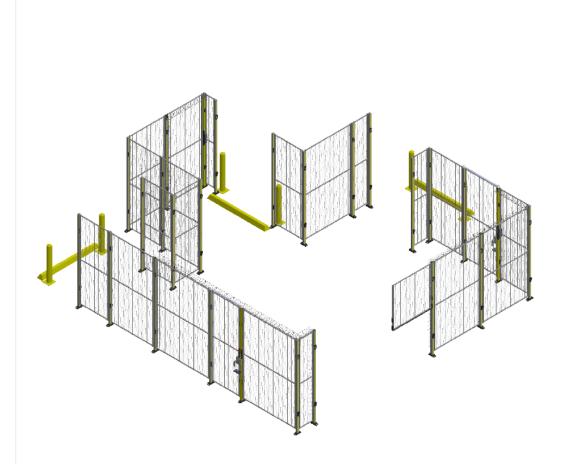
8 16





# Processevolution





ITEM NO.	PART NUMBER	Description	Vendor	QTY.
1	331-07-04-01	Euchner Door Interlock Mount Bracket	ProEvo - SM	2
2	D10-XXX150A	Single hinge door with upper frame	Axelent	1
3	D10-XXX150A	Single hinge door with upper frame	Axelent	1
4	0101	X-Tray U 60x60 Zinc Plated	Axelent	1
5	0101	X-Tray U 60x60 Zinc Plated	Axelent	2
6	0101	X-Tray U 60x60 Zinc Plated	Axelent	1
7	0101	X-Tray U 60x60 Zinc Plated	Axelent	1
8	0101	X-Tray U 60x60 Zinc Plated	Axelent	1
9	0111	X-Tray U 120x60 Zinc Plated	Axelent	1
10	0111	X-Tray U 120x60 Zinc Plated	Axelent	1
11	0111	X-Tray U 120x60 Zinc Plated	Axelent	1
12	0111	X-Tray U 120x60 Zinc Plated	Axelent	1
13	0111	X-Tray U 120x60 Zinc Plated	Axelent	1
14	7700-014	Key Hole Post Bracket	Axelent	11
15	7700-015	Post Bracket Top	Axelent	8
16	7700-066	Top Corner Bracket	Axelent	2
17	7700-066	Top Corner Bracket	Axelent	1
18	KH-3-150	Cutting Package - Panel	Axelent	1
19	L10-05-2	Hitch Lock	Axelent	1
20	L10-05-2	Hitch Lock	Axelent	1
21	P11-230	50x50 Post Yellow 2300mm Long	Axelent	15
22	P11-230	50x50 Post Yellow 2300mm Long	Axelent	8
23	P11-230-A01	50x50 Post with Pushbutton Holes	Axelent	3
24	W322-220025	Mesh Panel 2200 x 250	Axelent	1
25	W322-220040	Mesh Panel 2200 x 400	Axelent	3
26	W322-220070	Mesh Panel 2200 x 700	Axelent	1
27	W322-220080	Mesh Panel 2200 x 800	Axelent	5
28	W322-220090	Mesh Panel 2200 x 900	Axelent	3
29	W322-220100	Mesh Panel 2200 x 1000	Axelent	3
30	W322-220110	Mesh Panel 2200 x 1100	Axelent	1
31	W322-220120	Mesh Panel 2200 x 1200	Axelent	1
32	W322-220130	Mesh Panel 2200 x 1300	Axelent	3
33 34	W322-220150 Ø22 Push Button Legend Plate	Mesh Panel 2200 x 1500 Ø22mm Push Button Legend Plate	Axelent Electrical	4
35			Euchner	2
36	028_357 082122 a	RIEGEL NZ/TZ-S1 NZ1VZ-3131E-M	Euchner	1
37	082122_a 082122 a	NZ1VZ-3131E-M	Euchner	1
38	E2 AC-DXBC1002	Emergency Stop Push Botton	Leuze	3
39	VE TF32A5102	Emergency Stop Label	Leuze	3
40	AB8703	Fixed Straight Bollard - 915H x 115D	MHA Products	6
41	RWS1650	Recycled Rubber Wheel Stop Suitable for Parking Areas	рј Сох	3
42	M22FP-MSF11E30	22mm Pushbutton Momentary Illuminated	Switches Plus	2
43	M22FP-MSF11E30	22mm Pushbutton Momentary Illuminated	Switches Plus	2

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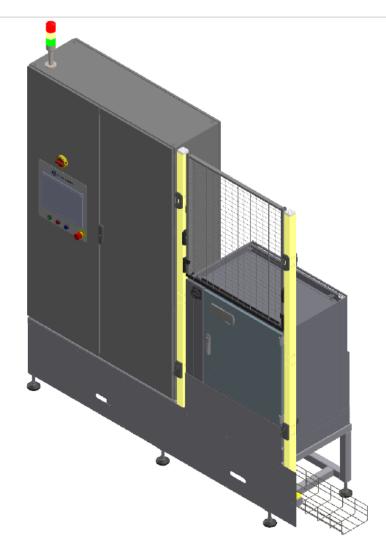
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5	3RD ANGLE PROJECTION	SHEET SIZE: A3	QUANTITY:
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			SHEET 1 OF



Palletising

Cell MCC

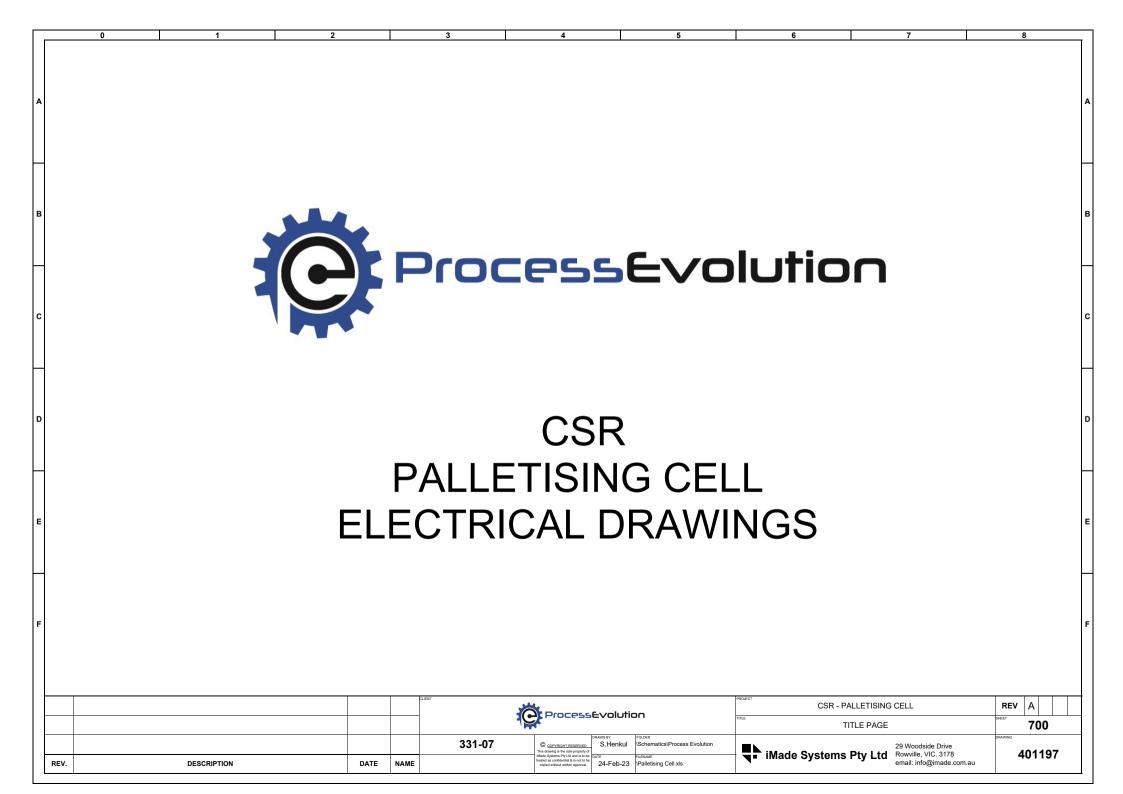


ITEM NO.	PART NUMBER	Description	Vendor	QTY.
1	ProEvo HMI Pushbutton Panel - AB 12in	ProEvo HMI Pushbutton Panel - AB 12"	Mallards	1
2	331-07-06-01	Robot Cabinet Plinth	ProEvo - Fab	1
3	331-07-06-02	Robot Plinth Front RH Panel	ProEvo - SM	1
4	331-07-06-03	Robot Plinth Side Panel	ProEvo - SM	1
5	331-07-06-04	Robot Plinth Front LH Panel	ProEvo - SM	1
6	oka_ku_lk10	Isolator Switch	APS Industrial	1
7	PV5310_12W	Panel View 12" Display	Allen Bradley	1
8	0122	X-Tray 110x220 Zinc Plated	Axelent	1
9	KH-3-150	Cutting Package - Panel	Axelent	1
10	P11-200	Post	Axelent	2
11	W322-220080	Mesh Panel 2200 x 800	Axelent	1
12	CST55 BWM Pulse tone 24VDC GN_YE_RD	Signal Tower - 24VDC Red-Yellow- Green w/ Alarm	Balluff	1
13	Kuka - Robot Controller	Kuka - Robot Controller	Kuka	1
14	E2 AC-DXBC1002	Emergency Stop Push Botton	Leuze	1
15	VE TF32A5102	Emergency Stop Label	Leuze	1
16	LVR8020100SSS	Machine Feet	Richmond Castors	6
17	SE 5841.600	Electrical Enclosure - 1800H 1200W 400D	Rittal	1
18	M22FP-MSF11E30	22mm Pushbutton Momentary Illuminated	Switches Plus	1
19	M22FP-MSF11E30	22mm Pushbutton Momentary Illuminated	Switches Plus	1
20	M22FP-MSF11E30	22mm Pushbutton Momentary Illuminated	Switches Plus	1



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		DO NOT SCALE	SURFACE TREATMENT:	
				SHEET 1 OF 1



PAGE TITLE REV PAGE TITLE REV 700 TITLE PAGE Α 730 POINT IO MODULE 10 - DIGITAL OUTPUTS Α 701 DIRECTORY 731 POINT IO MODULE 11 - DIGITAL OUTPUTS Α Α 702 DIRECTORY (CONT') Α 732 POINT IO MODULE 12 - DIGITAL OUTPUTS Α 733 POINT IO MODULE 13 - DIGITAL OUTPUTS Α 705 IP ADDRESS ALLOCATION Α 734 POINT IO MODULE 15 - DIGITAL OUTPUTS Α 735 POINT IO MODULE 16 - DIGITAL OUTPUTS Α 709 AC POWER DISTRIBUTION Α 736 POINT IO MODULE 17 - DIGITAL INPUTS Α POINT IO MODULE 18 - DIGITAL OUTPUTS Α 710 AC POWER DISTRIBUTION (SAFETY) Α 737 711 Α 738 POINT IO MODULE 19 - DIGITAL INPUTS Α AC POWER DISTRIBUTION (VSDs) 712 DC POWER DISTRIBUTION 739 POINT IO MODULE 20 - DIGITAL OUTPUTS Α Α 713 DC POWER DISTRIBUTION - CONVEYLINX MDR Α 740 DISTRIBUTION IO BLOCK #1 Α 714 CABINET EMERGENCY STOP PUSH BUTTON 741 DISTRIBUTION IO BLOCK #2 Α Α 715 REMOTE EMERGENCY STOPS & ISOLATION BOLTS Α 742 DISTRIBUTION IO BLOCK #3 Α 716 REMOTE EMERGENCY STOP PALLET DISPENSER Α 743 DISTRIBUTION IO BLOCK #4 Α LIGHT CURTAINS 717 Α 744 DISTRIBUTION IO BLOCK #5 Α SAFETY GATE SYSTEMS - SWITCH & LOCK 718 745 PALLET LIFT & PALLET LOWERATOR MOTOR BRAKES Α Α 719 POINT IO ADAPTER SUPPLY CONNECTIONS Α 746 SAFETY GATE 1 PUSH BUTTON STATION Α 720 POINT IO MODULE 1 - DIGITAL INPUTS 747 SAFETY GATE 2 PUSH BUTTON STATION Α Α LIGHT CURTAIN RESET PUSH BUTTONS & LAMPS 721 POINT IO MODULE 2 - DIGITAL INPUTS Α 748 Α 722 POINT IO MODULE 3 - DIGITAL INPUTS 749 FESTO VALVE BANK Α Α 723 POINT IO MODULE 4 - DIGITAL INPUTS Α 750 POINT IO MODULE 21a - SAFETY DIGITAL INPUTS Α 724 POINT IO MODULE 5 - DIGITAL INPUTS Α 751 POINT IO MODULE 21b - SAFETY DIGITAL INPUTS Α 725 POINT IO MODULE 6 - DIGITAL INPUTS Α 752 POINT IO MODULE 22a - SAFETY DIGITAL INPUTS Α 726 POINT IO MODULE 7 - DIGITAL INPUTS 753 POINT IO MODULE 22b - SAFETY DIGITAL INPUTS Α Α 727 POINT IO MODULE 8 - DIGITAL INPUTS Α 754 POINT IO MODULE 23b - SAFETY DIGITAL INPUTS Α 728 POINT IO MODULE 9 - DIGITAL INPUTS Α 755 POINT IO MODULE 23b - SAFETY DIGITAL INPUTS Α 729 POINT IO MODULE 14 - DIGITAL INPUTS (Sourcing) Α **CSR - PALLETISING CELL** REV ProcessEvolution DIRECTORY 701 331-07 S.Henkul iMade Systems Pty Ltd 401197 REV. NAME DESCRIPTION DATE 24-Feb-23 \Palletising Cell.xls

PAGE TITLE REV PAGE TITLE REV 756 POINT IO MODULE 24a - SAFETY DIGITAL OUTPUTS Α 780 CONVEYLINX CONTROLLERS A1 & A2 Α 757 POINT IO MODULE 24b - SAFETY DIGITAL OUTPUTS 781 CONVEYLINX CONTROLLERS A3 & A4 Α Α 758 POINT IO MODULE 25a - SAFETY DIGITAL OUTPUTS Α 782 CONVEYLINX CONTROLLERS A5 & A6 Α 759 POINT IO MODULE 25b - SAFETY DIGITAL OUTPUTS Α 783 CONVEYLINX CONTROLLERS A7 Α 760 POINT IO MODULE 26b - SAFETY DIGITAL INPUTS Α 784 CONVEYLINX CONTROLLERS B1 & B2 Α 761 POINT IO MODULE 26b - SAFETY DIGITAL INPUTS 785 CONVEYLINX CONTROLLERS B3 & B4 Α Α 786 CONVEYLINX CONTROLLERS B5 & B6 Α 763 ETHERNET SWITCH & NETWORK TOPOLOGY 787 CONVEYLINX CONTROLLERS B7 Α Α 764 ETHERNET SWITCH & NETWORK TOPOLOGY (CONT') Α 765 CABINET FAN Α 766 SCISSOR LIFT SERVO DRIVE 1 (DELTA 1.5kW) Α 790 AIR SUPPLY DUMP VALVES Α 767 SCISSOR LIFT SERVO DRIVE 1 IO TERMINALS 791 KUKA ROBOT SAFETY INTERFACE SIGNALS Α Α 768 SCISSOR LIFT SERVO DRIVE 2 (DELTA 1.5kW) Α 792 KUKA ROBOT EOAT - DISTRIBUTION IO BLOCK #1 Α 769 SCISSOR LIFT SERVO DRIVE 2 IO TERMINALS Α 793 KUKA ROBOT EOAT - DISTRIBUTION IO BLOCK #2 Α 770 LAYER PAD INFEED CONVEYOR VSD Α 771 LAYER PAD SCISSOR LIFT CONVEYOR VSD Α 772 LAYER PAD OUTFEED CONVEYOR VSD Α 773 PALLET LOWERATOR ROLLER CONVEYOR VSD Α 774 PALLET LOWERATOR VSD Α 775 PALLET LOWERATOR CHAIN CONVEYOR VSD Α 776 PALLET OUTFEED CONVEYOR 1 VSD Α 777 PALLET OUTFEED CONVEYOR 2 VSD Α 778 PALLET DISPENSER STACK LIFT VSD Α 779 PALLET DISPENSER OUTFEED CONVEYOR VSD Α **CSR - PALLETISING CELL** REV A ProcessEvolution 701 DIRECTORY (CONT') 331-07 S.Henkul iMade Systems Pty Ltd 29 Woodside Drive Rowville, VIC. 3178 401197 REV. DESCRIPTION NAME DATE 24-Feb-23 \Palletising Cell.xls

IP ADDRESS DESCRIPTION IP ADDRESS DESCRIPTION 192.168.1.117 POINT I/O ENET ADAPTER 1734-AENTR 192.168.1.130 KUKA ROBOT 192.168.1.120 LAYER PAD INFEED CONVEYOR VSD 192.168.1.121 LAYER PAD SCISSOR LIFT CONVEYOR VSD 192.168.1.122 LAYER PAD OUTFEED CONVEYOR VSD 192.168.1.123 PALLET LOWERATOR ROLLER CONVEYOR VSD 192.168.1.124 PALLET LOWERATOR VSD PALLET LOWERATOR CHAIN CONVEYOR VSD 192.168.1.125 192.168.1.126 PALLET OUTFEED CONVEYOR 1 VSD 192.168.1.127 PALLET OUTFEED CONVEYOR 2 VSD PALLET DISPENSER STACK LIFT VSD 192.168.1.128 192.168.1.129 PALLET DISPENSER OUTFEED CONVEYOR VSD 192.168.9.20 CONVLINX ECO CONTROLLER Z5A1 192.168.9.21 CONVLINX ECO CONTROLLER Z5A2 192.168.9.22 CONVLINX ECO CONTROLLER Z5A3 192.168.9.23 CONVLINX ECO CONTROLLER Z5A4 192.168.9.24 CONVLINX ECO CONTROLLER Z5A5 192.168.9.25 CONVLINX ECO CONTROLLER Z5A6 192.168.9.26 CONVLINX ECO CONTROLLER Z5A7 192.168.10.20 CONVLINX ECO CONTROLLER Z5B1 192.168.10.21 CONVLINX ECO CONTROLLER Z5B2 192.168.10.22 CONVLINX ECO CONTROLLER Z5B3 192.168.10.23 CONVLINX ECO CONTROLLER Z5B4 192.168.10.24 CONVLINX ECO CONTROLLER Z5B5 CONVLINX ECO CONTROLLER Z5B6 192.168.10.25 192.168.10.26 CONVLINX ECO CONTROLLER Z5B7 REV A CSR - PALLETISING CELL ProcessEvolution 705 IP ADDRESS ALLOCATION 331-07 iMade Systems Pty Ltd Rowville, VIC. 3178 401197 REV. DESCRIPTION DATE NAME 24-Feb-23 \Palletising Cell.xls

