

Connects to	Conn Name	Housing	Pin type	Pin Out	Signal	Cable	Wire	Signal	Pin Out	Pin type	Housing	Conn Name	Connects to
J1	P1	DT04-p2	1-66360-2	1	BATT+	W1	W1.1	BATT+	2	14awg Spade	N/A	P52	15A
		DT04-p2	1-66360-2	2	GND		W1.2	GND	2	N/A	Screw Term	P53	V/A Meter
GLV J2	P86	Molex 171692-0104	768230321	1	BATT+	W3	W3.1	BATT+	3	N/A	Screw Term	P54	V/A Meter
		Molex 171692-0104	768230321	2	GLV_RTN		W3.2	GLV_RTN	4	N/A	Screw Term	P55	V/A Meter
		Molex 171692-0104	768230321	3	MReset_B		W3.3	MReset_B	3	1-66360-2	DT04-p4	P3	J3
	768230321	4	GLV_RTN	GLV_RTN	4	1-66360-2							
J4	P4	DT04-p8	1-66360-2	1	GLVMS+	W3	W3.4	GLVMS+	1	14awg Spade	N/A	P56	15A
			1-66360-2	2	RIGHT SIDE E-STOP RTN		W3.5	RIGHT SIDE E-STOP RTN	1	1-66360-2	DT04-p4	P3	J3
			1-66360-2	3	MRESET_A		W3.6	MRESET_A	1	768230321	Molex 171692-0106	P57	GLV J3
			1-66360-2	4	MRESET_B			MRESET_B	2	768230321			
			1-66360-2	5	CPR_B			CPR_B	3	768230321			
			1-66360-2	6	AIRS+			AIRS+	4	768230321			
			1-66360-2	7	MRESET_B			MRESET_B	5	768230321			
			1-66360-2	8	GLV_RTN			GLV_RTN	6	768230321			
V/A Meter	P58	Screw Term	N/A	1	BATT+	W3.7	LEFT SIDE E-STOP RTN	2	1-66360-2	DT04-p4	P3	J3	
GLV J5	P19	Molex 171692-0112	768230321	1	MReset_B	W22	W22.1	MReset_B	1	1-66360-2	P6	J6	
			768230321	2	CPR_A			CPR_A	1	1-66360-2			
			768230321	3	CPR_A			CPR_A	1	1-66360-2			
			768230321	4	CPR_B			CPR_B	1	1-66360-2			
			768230321	5	GLV+			GLV+	1	1-66360-2			
			768230321	6	Mreset_A			Mreset_A	1	1-66360-2			
			768230321	7	AIRS+			AIRS+	1	1-66360-2			
			768230321	8	F_LED			F_LED	1	1-66360-2			
			768230321	9	GLV_RTN			GLV_RTN	1	1-66360-2			
			768230321	10	5V_RTN			5V_RTN	1	1-66360-2			
			768230321	11	AMS_FAULT			AMS_FAULT	1	1-66360-2			
			768230321	12	NC			NC	1	1-66360-2			
TSI J24	P38	Molex MiniFit JR 5556-10A	39000077	1	IMD_Fault_RTN	W22	W22.2	NC	1	1-66360-2			
			39000077	2	IMD_Fault_LED			IMD_Fault_LED	1	1-66360-2			
			39000077	3	Drive_BTN_RTN			LV_GND	1	1-66360-2			
			39000077	4	Drive_BTN			Drive_BTN	1	1-66360-2			
			39000077	5	Drive_LED			Drive_LED	1	1-66360-2			
			39000077	6	TSAL_Cock			TSAL_Cock	1	1-66360-2			
			39000077	7	SPARE_LED			SPARE_LED	1	1-66360-2			
			39000077	8	TSAL_Cock_RTN			NC	1	1-66360-2			
			39000077	9	Drive_LED_RTN			NC	1	1-66360-2			
			39000077	10	SPARE_LED_RTN			NC	1	1-66360-2			
GLV J6	P11	Molex 171692-0106	768230321	1	SL2	W5	W5.1	SL1_RTN	2	N/A	Screw Term	P59	DIN RAIL 1
		Molex 171692-0106	768230321	2	GLV+		W5.2	SL1	2	N/A	Screw Term	P60	DIN RAIL 4
		Molex 171692-0106	768230321	3	AIRS+		W5.3	AIRS+	3	39000077	Molex MiniFit JR 5556-04A	P61	DIN RAIL 7
		Molex 171692-0106	768230321	4	GLV_RTN		W5.4	AIRS-	4	39000077		P62	DIN RAIL 9
DIN RAIL 2	P14	Screw Term	N/A	2	SL1_OUT	W6	W6.1	SL1	1	1-66360-2	DT04-p2	P5	15
DIN RAIL 5	P15	Screw Term	N/A	2	SL2_OUT		W6.2	SL2	2	1-66360-2			

Connects to	Conn Name	Housing	Pin type	Pin Out	Signal	Cable w/o	Wire	Signal	Pin Out	Pin type	Housing	Conn Name	Connects to
DIN RAIL 8	P16	Screw Term	N/A	2	AIRS+		W6.3	AIRS+	3	1-66360-2	DT04-p4	P5	J5
DIN RAIL 10	P18	Screw Term	N/A	2	AIRS-		W6.4	AIRS-	4	1-66360-2	DT04-p5		
GLV J8	P22	Molex 171692-0102	768230321	1	SL_PRE_AMS	W7	W7.1	SL1_OUT	2	N/A	Screw Term	P63	DIN RAIL 3
		Molex 171692-0102	768230321	2	SL_POST_AMS		W7.2	SL2_OUT	2	N/A	Screw Term	P64	DIN RAIL 6
GLV J7	P23	Molex 171692-0106	768230321	1	CAN+	W9	W9.1	CAN+	1	39000077	Molex MiniFit JR 5556-06A	P65	TSI J35
			768230321	2	CAN-			CAN-	2	39000077			
			768230321	3	CHASS_GND			CHASS_GND	3	39000077			
			768230321	4	CHASS_GND			CHASS_GND	4	39000077			
		768230321	6	GLV_RTN	GLV_RTN		6	39000077					
		Molex 171692-0106	768230321	5	GLV+	W9.2	GLV+	1	14awg Spade	N/A	P66	10A	
10A	P25	N/A	14awg Spade	2	GLV+	W9.3	GLV+	5	39000077	Molex MiniFit JR 5556-06A	P65	TSI J35	
GLV J10	P26	A USB Male	N/A	1	5V+	W15	W15	5V+	1	N/A	Micro B USB Male	P68	SCADA
			N/A	2	NC			NC	2	N/A			
			N/A	3	NC			NC	3	N/A			
			N/A	4	5V_RTN			5V_RTN	4	N/A			
GLV J4	P27	Screw Term	N/A	1	SCADA RLY	W16	W16	MRESET_A	2	N/A	Screw Term	P27	GLV J4
GLV J1	P28	Screw Term	N/A	2	CAN+	W17	W17	CAN+	3	N/A	Screw Term	P28	GLV J1
GLV J9	P29	DB9 Female	N/A	1	5V_RTN	W18	W18	5V_RTN	1	N/A	DB9 Female	P71	SCADA
			N/A	3	5V_RTN			5V_RTN	3	N/A			
			N/A	4	CAN-			CAN-	4	N/A			
			N/A	8	CAN+			CAN+	8	N/A			
GLV P1	P30	Pitch 0.1" Female Header	N/A	1	SDA	W19	W19	SDA	1	N/A	Pitch 0.1" Female Header	P72	SCADA
			N/A	2	NC			NC	2	N/A			
			N/A	3	SCL			SCL	3	N/A			
			N/A	4	F3			F3	4	N/A			
			N/A	5	Ctrl			Ctrl	5	N/A			
			N/A	6	F1			F1	6	N/A			
			N/A	7	NC			NC	7	N/A			
N/A	8	F2	F2	8	N/A								
GLV J12	P31	Molex 171692-0102	768230321	1	GLV+	W38	W38	GLV+	1	1-66360-2	DT04-p2	P12	J12
			768230321	2	GLV_RTN			GLV_RTN	2	1-66360-2			
J11	P11	USB 3.0 Female	N/A	1	FLASH DRIVE	W46	W46	FLASH DRIVE	1	N/A	USB 3.0 Male	P73	SCADA
J17	P17	USB 3.0 Female/ HDMI Female	N/A	1	COCKPIT SERIAL	W39	W39	COCKPIT SERIAL	1	N/A	USB 3.0 Male/ HDMI Male	P74	SCADA
			N/A	2	COCKPIT SCREEN			COCKPIT SCREEN	2	N/A			
TSI J3	P34	Molex MiniFit JR 5556-10A	39000077	1	BRAKE_24	W24	W24.1	BRAKE_24	3	1-66360-2	DT06-p12	P9	J9
			39000077	2	BRAKE_24			BRAKE_24	4	1-66360-2			
			39000077	3	BP			BP	5	1-66360-2			
			39000077	4	NC			NC	6	1-66360-2			
			39000077	5	APPS1_10			APPS1_10	7	1-66360-2			
			39000077	6	APPS1			APPS1	8	1-66360-2			
			39000077	7	APPS1_RTN			APPS1_RTN	9	1-66360-2			
			39000077	8	APPS2_5			APPS2_5	10	1-66360-2			
			39000077	9	APPS2			APPS2	11	1-66360-2			

Connects to	Conn Name	Housing	Pin type	Pin Out	Signal	Cable	Wire	Signal	Pin Out	Pin type	Housing	Conn Name	Connects to
			39000077	10	APPS2_RTN			APPS2_RTN	12	1-66360-2			
DIN RAIL 4	P35	Screw Term	1-66360-2	1	BOT		W24.2	SL2_IN	1	1-66360-2			
DIN RAIL 5	P36	Screw Term	1-66360-2	1	BOT_RTN		W24.3	SL2_OUT	2	1-66360-2			
			39000077	1	BP				BP	1			
TSI J21	P37	Molex MiniFit JR 5556-06A	39000077	2	BP_RTN	W23	W23	BP_RTN	2	1-66360-2	DT06-p6	P21	J21
			39000077	3	TSAL_1			TSAL_1	3	1-66360-2			
			39000077	4	TSAL_1_RTN			TSAL_1_RTN	4	1-66360-2			
			39000077	5	RTDS			RTDS	5	1-66360-2			
			39000077	6	RTDS_RTN			RTDS_RTN	6	1-66360-2			
								39000077	1	FlowRate			
TSI J2	P39	Molex MiniFit JR 5556-08A	39000077	2	FlowRate_5V	W43	W43	FlowRate_5V	2	1-66360-2	DT04-p8	P2	J2
			39000077	3	FlowRate_RTN			FlowRate_RTN	3	1-66360-2			
			39000077	4	NC			NC	4	1-66360-2			
			39000077	5	CoolTemp_In_1			COOLTEMP_1	5	1-66360-2			
			39000077	6	Temp_RTN_1			Temp_RTN_1	6	1-66360-2			
			39000077	7	CoolTemp_In_2			COOLTEMP_2	7	1-66360-2			
			39000077	8	Temp_RTN_2			Temp_RTN_2	8	1-66360-2			
								39000077	1	CAN_H			
TSI J34	P40	Molex MiniFit JR 5556-04A	39000077	2	CAN_L	W47	W47	CAN_L	2	N/A	Screw Term	P70	CAN ISO
			39000077	3	LV_RTN			LV_RTN	3	N/A	Screw Term		
			39000077	4	NC			NC	4	N/A	Screw Term		
								39000077	1	LV_RTN			
TSI J7	P41	Molex MiniFit JR 5556-08A	39000077	2	+24V	W20	W20	+24V	2	+24V	Molex MiniFit JR 5556-08A	P80	IMD
			39000077	3	LV_RTN			LV_RTN	3	LV_RTN			
			39000077	4	LV_RTN			LV_RTN	4	LV_RTN			
			39000077	5	IMD_MHS			IMD_MHS	5	IMD_MHS			
			39000077	6	NC			NC	6	NC			
			39000077	7	NC			NC	7	NC			
			39000077	8	IMD_STATUS			IMD_STATUS	8	IMD_STATUS			
								39000077	1	AIRS+			
TSI J8	P42	Molex MiniFit JR 5556-02A	39000077	2	AIRS-	W26	W26.2	AIRS-	2	14awg Spade	N/A	P86	DC RELAY
								39000077	1	Cooling_power			
TSI J10	P43	Molex MiniFit JR 5556-02A	39000077	2	Cooling_power	W28	W28	Cooling_power	2	1-66360-2	DT04-p2	P10	J10
								39000077	1	Cooling_RTN			
TSI J13	P44	Molex MiniFit JR 5556-02A	39000077	2	Cooling_RTN	W29	W29	Cooling_RTN	2	1-66360-2	DT04-p2	P13	J13
								39000077	1	PC_Relay+			
TSI J9	P45	Molex MiniFit JR 5556-02A	39000077	2	PC_Relay-	W30	W30	PC_Relay-	2	N/A		P75	PC RELAY
TSI J1	P46	3 Position Rectangular Housing Connector Plug		1	MC+	W34	W34.1	MC+	1	N/A	Screw Term	P76	PC RELAY-
		3 Position Rectangular Housing Connector Plug		2	HV-		W34.2	HV-	2	14awg Spade	N/A	P93	- fuse
		3 Position Rectangular Housing Connector Plug		3	HV+		W34.3	HV+	3	14awg Spade	N/A	P79	+ fuse
					HV+			2			P67	IMD	
		Molex MiniFit JR 5556-04A	39000077	1	SL1_IN		W48.1	SL1_IN	1	N/A	Screw Term	P82	DIN RAIL 1

Connects to	Conn Name	Housing	Pin type	Pin Out	Signal	Cable	Wire	Signal	Pin Out	Pin type	Housing	Conn Name	Connects to
TSI J6	P48	Molex MiniFit JR 5556-04A	39000077	2	SL1_OUT	W48	W48.2	SL1_OUT	1	N/A	Screw Term	P83	DIN RAIL 2
		Molex MiniFit JR 5556-04A	39000077	3	AIRS+		W48.3	AIRS+	1	N/A	Screw Term	P84	DIN RAIL 7
		Molex MiniFit JR 5556-04A	39000077	4	AIRS-		W48.4	AIRS-	1	N/A	Screw Term	P85	DIN RAIL 9
TSI 25	P49	Molex MiniFit JR 5556-04A	39000077	1	A1_HV	W49	W49	A1_HV	1	N/A	Screw Term	P94	CURRENT SENSOR
			39000077	2	A2_HV			A2_HV	2	N/A	Screw Term		
			39000077	3	I/O_Ground			I/O_Ground	3	N/A	Screw Term		
			39000077	4	+5HV			+5HV	4	N/A	Screw Term		
TSI J32	P50	Molex MiniFit JR 5556-08A	39000077	1	INGL_GND	W21	W21.1	INGL_GND	1	1-66360-2	DT04-p12	P20	J20
			39000077	2	INGL_VCC			INGL_VCC	2	1-66360-2			
			39000077	3	I/O_ground			I/O_ground	3	1-66360-2			
			39000077	4	NC			NC		1-66360-2			
			39000077	5	Throttle_HV			Throttle_HV	5	1-66360-2			
			39000077	6	JP3 3			JP3 3		1-66360-2			
			39000077	7	JP3 1			JP3 1		1-66360-2			
			39000077	8	BP_HV			BP_HV	8	1-66360-2			
CAN ISO	P51	Screw Term	N/A	1	CAN_H	W21.2	CAN_H	11	1-66360-2				
		Screw Term	N/A	2	CAN_L		CAN_L	10	1-66360-2				
		Screw Term	N/A	3	LV_RTN		LV_RTN	9	1-66360-2				
		Screw Term	N/A	4	NC		NC		1-66360-2				
DC Relay	P87	N/A	14awg Spade	N/A	W50	W50		N/A	14awg Spade	N/A	P88		
25 Ω	P91	N/A	14awg Spade	N/A	W51	W51		N/A	14awg Spade	N/A	P92		
DC Relay	P89	N/A	14awg Spade	N/A	W52	W51		N/A	14awg Spade	N/A	P90		