GENERAL/OVERVIEW WIRING SCHEMATIC

MMI<>IOBOARD<>PQ AMPLIFIER<>SMPS<>FILTER

USB 2.0

USB Comm.Cable

MMI Power Cable

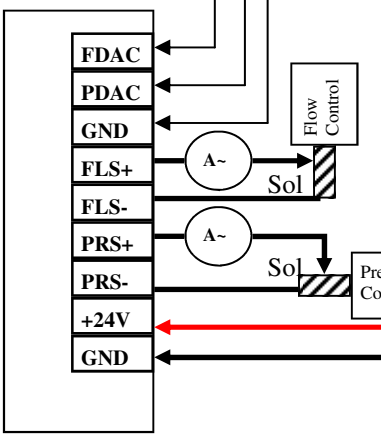
Data Comm. Cable

+

-

±10V

±10V



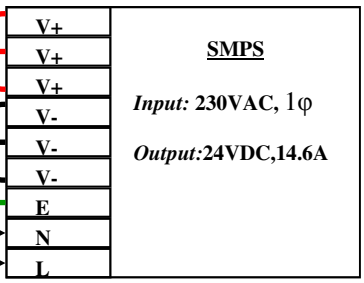
Flow Control

A~ Sol

A~ Sol

Pressure Control

PQ Amplifier



SMPS

Input: 230VAC, 1φ

*Output:*24VDC,14.6A

EARTH

Input:230VAC, 1φ

Line

EARTH

Neutral

Line Filter

3A

Neutral

Line

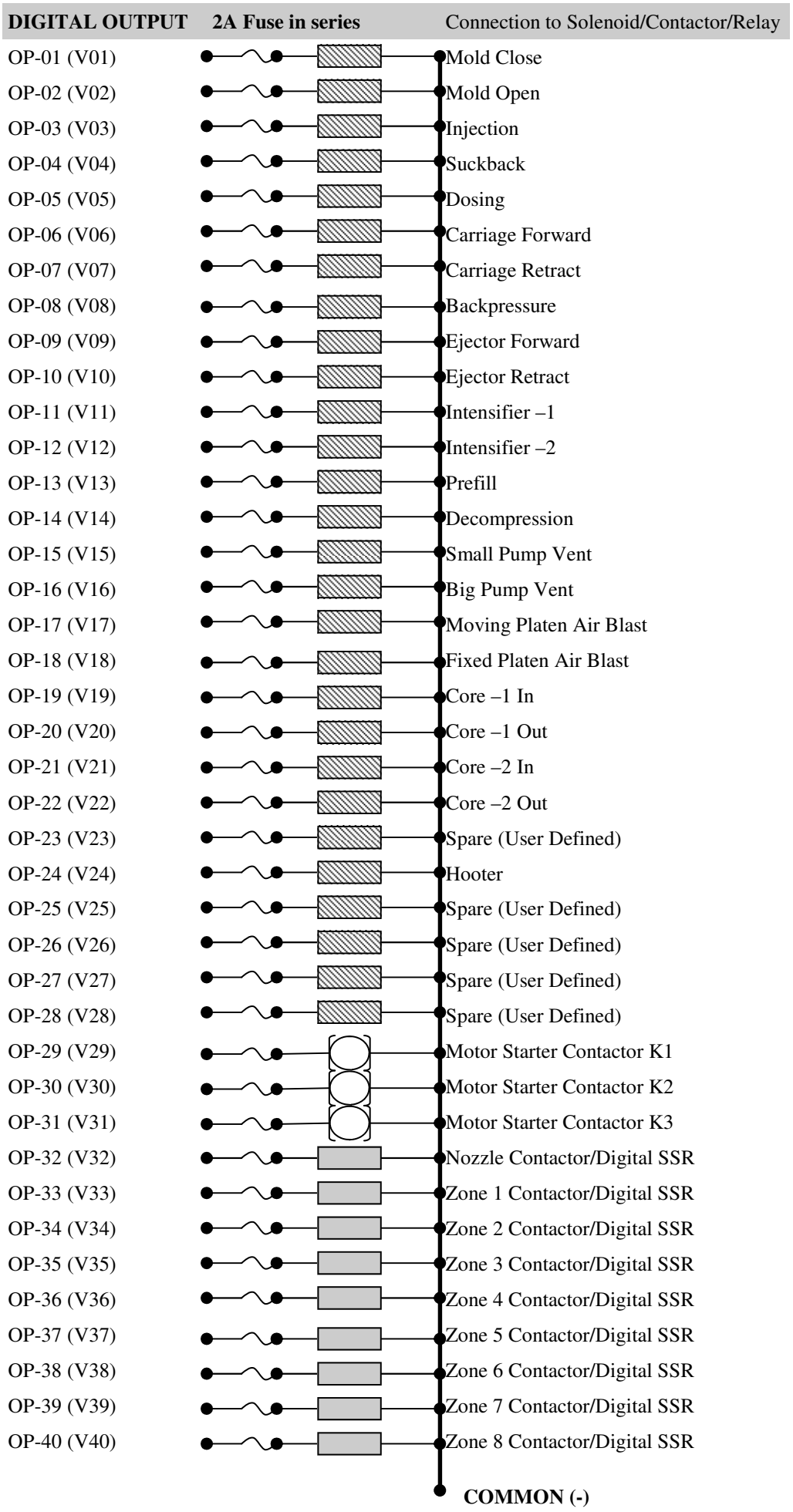
Inside the Bottom Panel

Vignan Electronics
Imagine.Inspire.Automate.

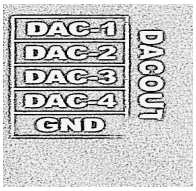
COMMON/RETURN WIRE FROM LSW/SENSORS/MODULES SHOULD BE CONNECTED TO DIGITAL INPUTS

DIGITAL INPUT	CONNECTION TO
DI-01 (LSW01)	MOLD OPEN
DI-02 (LSW02)	MOLD CLOSE SLOW - 1 END (START FAST)
DI-03 (LSW03)	MOLD CLOSE FAST END (START SLOW-2)
DI-04 (LSW04)	MOLD CLOSE SAFETY START
DI-05 (LSW05)	MOLD CLOSE SAFETY END (LOCKING START)
DI-06 (LSW06)	MINIMUM MOLD HEIGHT SAFETY
DI-07 (LSW07)	MOLD OPEN SLOW-1
DI-08 (LSW08)	MOLD OPEN SLOW-2
DI-09 (LSW09)	MOLD LOCKING STAGE –1 (PS1)
DI-10 (LSW10)	MOLD LOCKING STAGE –2 (PS2)
DI-11 (LSW11)	MOULD DECOMPRESSION (PS3)
DI-12 (LSW12)	EJECTOR FORWARD POSITION
DI-13 (LSW13)	EJECTOR RETRACT POSITION
DI-14 (LSW14)	FRONT SAFETY GUARD + SEMI AUTO START
DI-15 (LSW15)	REAR SAFETY GUARD
DI-16 (LSW16)	DROP DETECT
DI-17 (LSW17)	CARRIAGE FORWARD POSITION
DI-18 (LSW18)	CARRIAGE RETRACT POSITION
DI-19 (LSW19)	RIP START
DI-20 (LSW20)	DOSING END (SUCKBACK START)
DI-21 (LSW21)	SUCKBACK END
DI-22 (LSW22)	ENERGY METER PULSE INPUT
DI-23 (LSW23)	MOVING PLATEN AIR EJECTOR
DI-24 (LSW24)	FIXED PLATEN AIR EJECTOR
DI-25 (LSW25)	CORE-1 IN
DI-26 (LSW26)	CORE-1 OUT
DI-27 (LSW27)	CORE-2 IN
DI-28 (LSW28)	CORE-2 OUT
DI-29 (LSW29)	HOPPER EMPTY
DI-30 (LSW30)	SCREW SPEED PROXY SENSOR
DI-31 (LSW31)	HYDRAULIC MOTOR ON INPUT
DI-32 (LSW32)	EMERGENCY INPUT(NC)

32 DIGITAL INPUTS :TYPE NPN
DIGITAL INPUTS (1-32) WIRING SCHEMATIC



DIGITAL OUTPUTS (1-40) WIRING SCHEMATIC



DAC OUTPUT (-10 TO +10VDC)	CONNECTION TO
DAC-1 ⟶	FLOW CONTROL ELEMENT (DEFAULT)
DAC-2 ⟶	PRESSURE CONTROL ELEMENT (DEFAULT)
DAC-3 ⟶	FLOW CONTROL ELEMENT (DEFAULT)
DAC-4 ⟶	PRESSURE CONTROL ELEMENT (DEFAULT)
GND ⟶	TO COMMON OF AMPLIFIER CARD/SERVO DRIVE/AC DRIVE

ALL DAC CAHNNELS ARE PROGRAMMABLE/USER DEFINED ON MMI TO OUTPUT EITHER OF THE FOLLOWING:

DAC PIPING	OUTPUT
S	SET FLOW
P	SET PRESSURE
B	SET BACK PRESSURE
F	FULL VALUE=100% OF DAC CHANNEL MAX. CALIBRATED VALUE
1-9	1-10%, 2-20%, 3-30%, 4-40%, 5-50%, 6-60%, 7-70%, 8-80%, 9-90% OF DAC CHANNEL MAX. CALIBRATED VALUE

AMPLIFIER CARD NOTES:

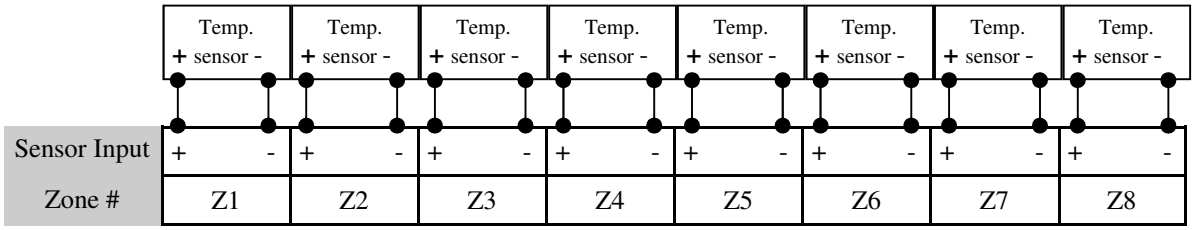
BY DEFAULT AMPLIFIER CARD DRIVES VALVE SOLENOIDS RATED UPTO 24VDC,1.6A

ANY ABOVE VOLTAGE REQUIREMENTS >24VDC, RECONNECT JUMPERS J1,J2 TO HV.

ANY ABOVE CURRENT REQUIREMENTS>1.6A, REPLACE 20E RESISTORS

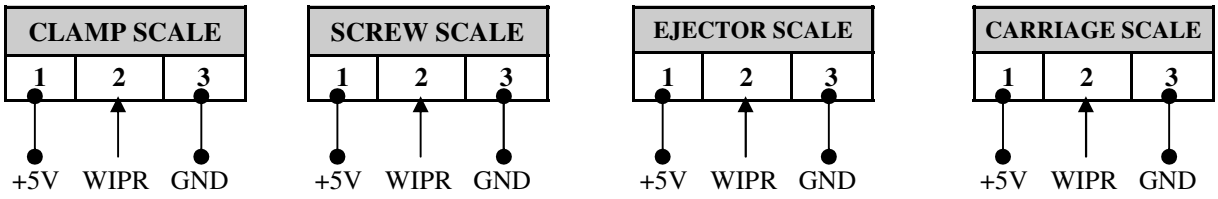
> For Backpressure proportional valve connect DAC-3/4 output to an ***extra amplifier card*** & **set the Auto Solenoid energization tables on MMI accordingly**.

DAC/PROPORTIONAL OUTPUT WIRING SCHEMATIC

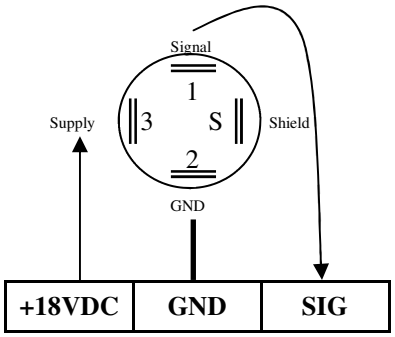


Temperature Sensor= J/K-type Thermocouple (Isolated)/ Pt-100 RTD

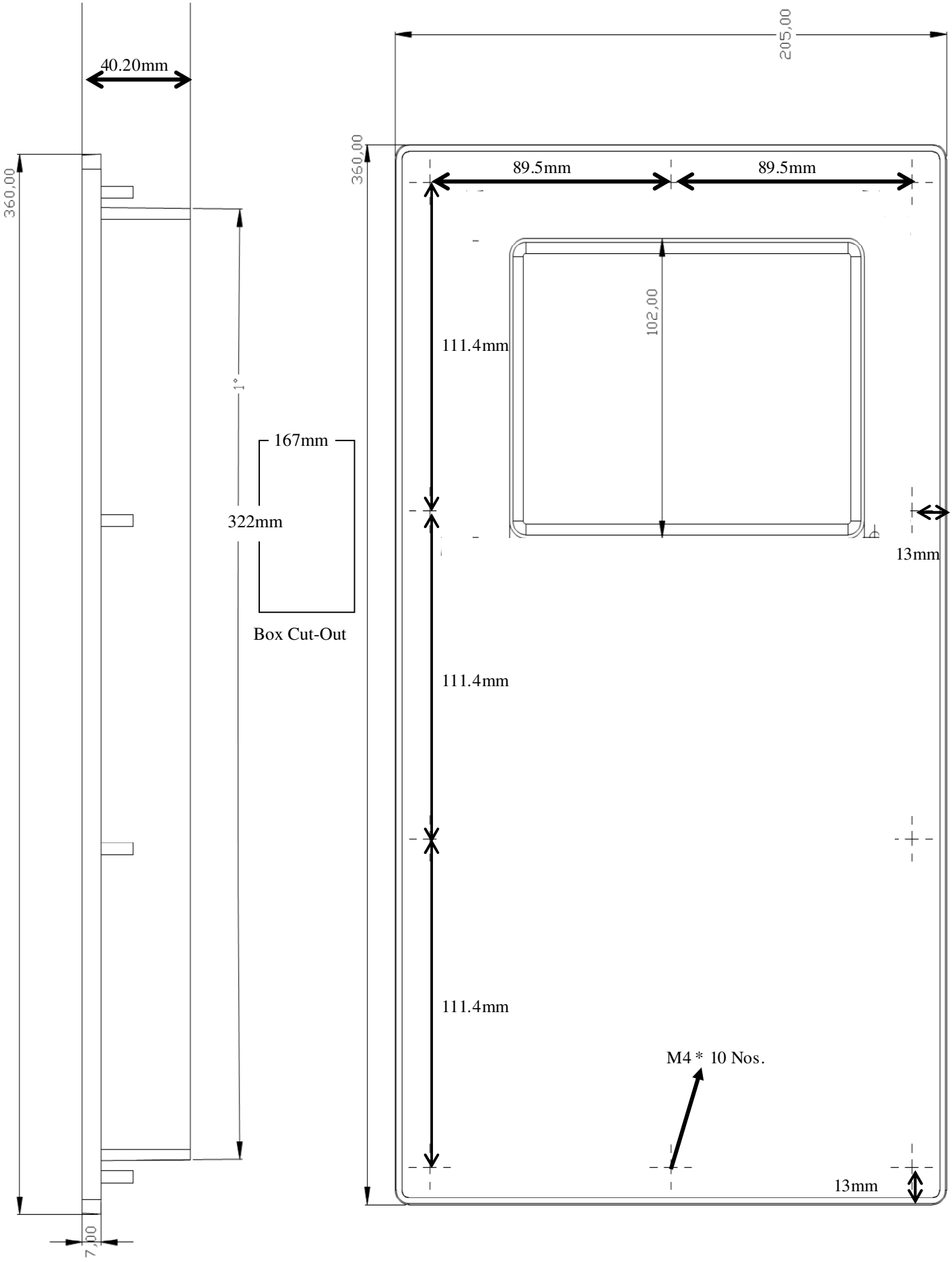
Temperature Sensor Wiring Schematic



Linear Potentiometers/Scales Wiring Schematic



Pressure Transducer Input Wiring Schematic



SS57 Frame Mounting Dimensions