



VTC7/50 DISTRIBUTED I/O CONTROLLER

AEC's VTC 7/50 VacTrac control system features distributed I/O and an open architecture approach using proven off-the-shelf components. Color touch-screen interface allows user-friendly control of up to 7 vacuum pumps and 50 loading stations.



VTC 7/50

STANDARD FEATURES

- Allen-Bradley SLC 5/04 programmable controller with 10" color touch-screen operator interface
- Diagnostics, operating instructions and parts information built into controller
- NEMA 4 "insulation displacement" and patch cord connections for rapid installation
- System designed for easy expansion
- Station options can be easily added or moved
- I/O components can be replaced without shutting down system
- Two cable "Armor Block" I/O modules
- Controls up to fifty (50) stations
- Controls up to seven (7) vacuum pumps
- Controls up to three (3) central alarms
- Time-fill or volume-fill operation
- 115/1/60 or 230/1/50/60 supply voltage
- 24VDC control voltage
- 8 or 16 I/O module including time- or volume-fill loading, local station on/off control, low level input, alarm output, local or central proportioning control
- 16 I/O module also includes vacuum receiver blowback, vacuum receiver positive discharge, and local conveying line purge

OPTIONAL FEATURES

- Modem, SCADA/Ethernet capability, or web server/Internet capability
- Remote interface (two maximum), Remote display (two maximum)
- Central alarm (three maximum), additional audible/visual unit with silence button
- Central purge capability
- Single or dual power supplies for network and output power: 115/1/60 or 230/1/50/60
- Station interface module with 20' cable and receptacle wired into the hopper junction box
- Sequence or external atmospheric valve modification, 20' cable per station
- Local station on/off switch with 20' cable
- Low level alarm in material supply hopper, with or without level switch
- Local alarm with light box, 20' cable
- Central or local remote proportioning valve controller
- Vacuum power unit module/circuit breaker/disconnect, cables for vent valve, high vacuum switch

OPTIONAL POWER SUPPLY

Power supplies are available for network and output power, 115/1/60 and 230/1/50/60 voltage. Power supply sizing is based on power supplies mounted in center of system; each station has volume-fill with sequence valve and material proportioning capability. Consult factory if system is equipped with additional options or does not meet the stated criteria.

Single power supply serves up to 25 stations, 4 pumps, 2 central alarms, with 300 ft. network or output cable. Dual power supplies serve up to 50 stations, 7 pumps, 3 central alarms, with 600 ft. of network or output cable.

OPTIONAL REMOTE PROPORTIONING VALVE CONTROLLER

The central remote proportioning controller includes a receptacle in the junction box and 20' of cable. For use with remote proportioning valves without controls.

The local remote proportioning controller includes a connector in the junction box and 20' of cable. For use with remote proportioning valve with E24 controller.

RETROFIT OPTION

A retrofit option is available to use existing AEC components with a distributed I/O system. Consult factory for proper conversion components.

INSTALLATION COMPONENTS

Component	Description
Communication cable	246 ft., 656 ft., or 1375 ft. roll
Power cable	246 ft., 656 ft., or 1375 ft. roll
Interface display cable	50 ft., 100 ft, 250 ft., 500 ft., 1000 ft. roll
Splice kits	Kit A: splices existing flat cables Kit B: Adds power supply
Conduit hangers(100)	1.5" to 2.5", 3" and 3.5", 4" or 5"

ARMORBLOCK MODULE CONFIGURATION

		Input	Output
All	1	Demand switch	Sequence valve
	2	Volume-fill proximity switch	Alarm output
	3	Station bypass switch	Remote proportioning valve
	4	Low level switch	Remote proportioning valve
VTC7/50D Plus	5	Open	Positive discharge control
	6	Open	
	7	Open	Local purge valve control
	8	Open	Not used

SYSTEM CHECKLIST

- Main controller: Central purge option, Modem, SCADA or Ethernet capability
- Remote interface: how many?
- Remote display: how many?
- Central alarm: how many locations?
- Central purge
- Material line proofing: how many connections?
- Power supply: how many stations now?
future? _____
- Station Armor Block modules: how many?
- Sequence valve modifications: how many stations?
- Internal atmospheric valve adder: how many?
- Local station On/Off control: how many?
- Low level alarms: how many?
with or without switch? _____
- Local alarms: how many?
- Remote proportioning valves: how many?
central or local? _____
- Vacuum receiver blowback: how many receivers?
- Positive discharge control: how many receivers?
- Individual line purge
- Vacuum pumps: how many?
- Filter chamber, blowback control: how many?
- Communication cable
- Power cable
- Interface display cable
- Splice kits; required for existing cables only
- Component hangers