

- All modern stacker truck functionality as standard
- 200Arms and 250Arms traction power options
- 330A dc series motor pump drive
- Compatible with all AC induction motors
- Versatile throttle input – resistive & voltage
- Programmable Belly-Button function
- Programmable lift/lower speed & rates
- Five coil outputs
- Software interlocking of drive & hydraulics
- Intelligent Hill-Hold function
- Low battery management
- CAN tiller compatible
- Sealed to IPx5
- Designed to meet UL583 requirements

The C3pump controller, which offers a combination of AC traction and DC pump drives, is an extension of Curtiss-Wright's high-performing, compact and cost-effective C3 family, but with all the specialist features needed for efficient and precise control of modern day stacker trucks. Flexible, yet simple programming means the controller is compatible with all types of AC induction and DC series motors, while a dedicated thermistor input allows traction motor temperature and the power to the motor to be reduced if it is becoming too warm.

The C3pump features up to eight dedicated digital inputs that can be individually switched to 0V, open-circuit, B+ or a combination of these options to provide the active state. The controller also accepts multiple throttle types, including 2- or 3-wire resistive and voltage. CAN tiller compatibility is provided as standard, offering vehicle OEMs maximum input flexibility.

Five, 2A outputs allow for control of the line contactor, hold and proportional lower valves, a horn coil, plus an electro-magnetic brake. All outputs are protected against wiring errors and contain coil suppression circuits, meaning external diodes are not required.



To ensure maximum efficiency, the C3pump employs an intelligent Hill-Hold function that only takes power from the battery if the vehicle starts to roll. As soon as it is detected that Hill-Hold is not required, then no further power will be consumed. Traditionally, application of a brake switch has been needed to provide this function.

In addition to on-board LEDs that can communicate basic status and diagnostic information, the controller includes two service timers – one for keyswitch hours and one for operational 'active' hours. These can be set by an OEM or service agent, thereby ensuring an appropriate maintenance regime. After a service is complete, the timers can be set to the next service interval.

The innovative construction methods employed by the C3pump ensure reliable and repeatable assembly of the electronic enclosure, which results in consistent protection of the electronic circuits from the environment and efficient transfer of heat to the baseplate. The design is compliant with all relevant international legislation and takes into account critical dimensions as defined by UL.

SPECIFICATIONS

ELECTRICAL

SUPPLY VOLTAGE	16-30Vdc
PEAK VOLTAGE	36Vdc
REVERSE BATTERY VOLTAGE	40Vdc
PWM FREQUENCY	10kHz or 20kHz
COIL OUTPUTS	5 x 2A, protected
TRACTION MOTOR OUTPUT – 2 MINS	200Arms (C3pump-200) 250Arms (C3pump-250)
TRACTION MOTOR OUTPUT – 1 HR	80Arms min. (C3pump-200) 100Arms min. (C3pump-250)
PUMP MOTOR OUTPUT – 2 MINS	330Adc min.
PUMP MOTOR OUTPUT – 1 HR	130Adc min.

MECHANICAL

POWER CONNECTIONS	M6
CONTROL CONNECTIONS	Molex® Mini-Fit, Jr.
LENGTH	192mm / 7.56"
WIDTH	188mm / 7.40"
HEIGHT	61mm / 2.40"

ENVIRONMENTAL

MOISTURE RESISTANCE	IPx5
OPERATING TEMPERATURE	-30°C to 55°C
STORAGE TEMPERATURE	-40°C to 70°C
EMC	Tested to EN12895

PRODUCT CODES

CONTROLLERS

C3pump-200	200Arms traction drive, 330Adc pump drive
C3pump-250	250Arms traction drive, 330Adc pump drive

DISPLAYS

iGAUGE	52mm diameter, LCD gauge
TRUCHARGE	10 segment, LED gauge

PROGRAMMERS

DTT	Diagnostic Test Tool, hand-held programmer
C3 PCP SERVICE	PC Programmer, service access
C3 PCP OEM	PC Programmer, OEM and manufacturing access
