

## DCX F with EtherNet/IP

### General Description

Branson now offers the DCX F power supply with EtherNet/IP, allowing real-time distributed control and



communication with a PLC. The DCX F with EtherNet/IP was developed for PLC/HMI centered automation

systems and that require configurable weld modes and parameter settings, along with weld results and real-time welding feedback.

EtherNet/IP allows complex automated systems requiring multiple devices to be wired in a single network using common Ethernet physical media and devices. Using a single network, EtherNet/IP allows a programmable automation controller to monitor the status of an entire system, as well as communicate parameter changes to individual devices in real-time. The DCX F, when on a EtherNet/IP network, can provide a cost effective system with high performance and scalability.

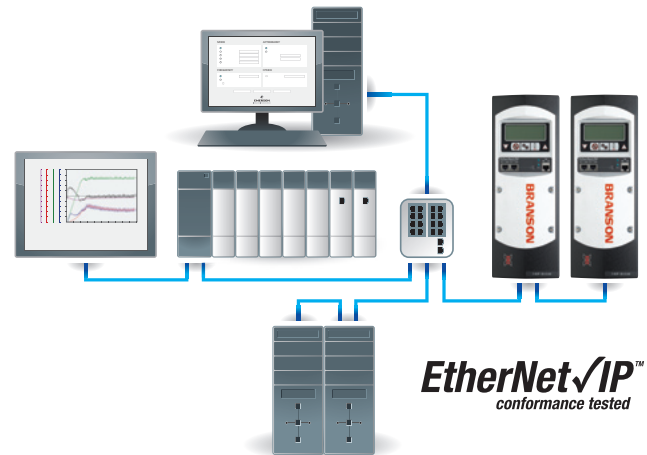
### DCX F Global User Interface

The DCX F offers a powerful web-based interface that allows setup and real-time diagnostics of the EtherNet/IP link between the DCX F and a PLC.

Diagnostic Field Bus

| FIELD BUS INFO |  | COMMUNICATION SLATE                     |   |
|----------------|--|---|---|
| Slave Address  | 192.168.10.100 <input type="radio"/> Alarm   | <input checked="" type="radio"/> Ready  | <input checked="" type="radio"/> Running              |
| Data Formed    | Intel Baud Rate N/A  | <input checked="" type="radio"/> Bus On | <input checked="" type="radio"/> Configuration Locked |
| Slave Status   | <input type="radio"/> Offline <input checked="" type="radio"/> Stop <input type="radio"/> Idle <input type="radio"/> Operate | <input type="radio"/> Parameter Fault   | <input type="radio"/> Configuration Fault             |
| CONTROL WORD   |  | STATUS WORD                             |   |
| BITS           | 7 6 5 4 3 2 1 0  | BITS                                    | 7 6 5 4 3 2 1 0                                       |
| STW1H          | RES MA RES PSN4 PSN3 PSN2 PSN1 PSN0  | ZSW1H                                   | DL1 MA PSCA PSN4 PSN3 PSN2 PSN1 PSN0                  |
| STW1L          | WFS3 WFS2 WFS1 WFS0 RES RES ES RES   | ZSW1L                                   | WFS3 WFS2 WFS1 WFS0 HDPE TEE ES NO-B                  |
| STW2H          | RES RES BRUF EMUT RES RES ON SST   | ZSW2H                                   | RES RES LM OK ON CIP SM TP-B                          |
| STW2L          | RES RES SPT2 SPT1 SPT0 SPT   | ZSW2L                                   | DU1 HW4 CFS ND7 EQ8 WA4 DM3 SE2                       |

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Industrial Automation



### Features and Benefits

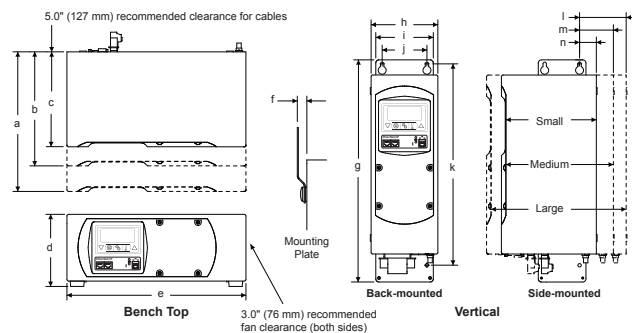
- One standard Network – EtherNet/IP
- Two EtherNet/IP ports for multiple line topology support
- Explicit and Implicit messaging
- ODVA certified
- Compact form factor for installation
- Available in 20kHz, 30kHz, and 40kHz
- Power levels up to 4kW
- Multiple weld modes and weld limits
  - Continuous
  - Time
  - Energy
  - Peak Power
  - Ground Detect
- Actuator control options
- Enhanced automation control
- Weld preset creation
- Part detect input

## True Global Support & Service

Branson Ultrasonics is the world leader in materials joining with more than 1,800 employees and 70 sales and support offices. We are committed to leading the industry in products, solutions, service and support excellence. That means fast delivery, troubleshooting, parts replacement, feasibility studies, cooperative research, preventative maintenance and repair services. Branson is part of the Industrial Automation division of Emerson, a diversified international manufacturing and technology company committed to developing technological breakthroughs that advance the performance of a wide range of products and processes.

### DCX F Series Specifications

| Dimension | Inch  | mm    | Dimension | Inch  | mm    |
|-----------|-------|-------|-----------|-------|-------|
| a         | 10.63 | 270.0 | h         | 5.22  | 132.6 |
| b         | 8.63  | 219.2 | i         | 4.50  | 114.3 |
| c         | 7.13  | 181.1 | j         | 3.50  | 88.9  |
| d         | 5.53  | 140.5 | k         | 15.75 | 400.0 |
| e         | 14.01 | 355.9 | l         | 3.37  | 85.6  |
| f         | 0.37  | 9.4   | m         | 2.37  | 60.2  |
| g         | 17.38 | 441.5 | n         | 1.06  | 26.9  |



### Three Power Supply Sizes

| Size                         | Small                                      |         |        | Medium                                     |        | Large  |        |
|------------------------------|--|---------|--------|--|--------|--|--------|
| <b>DCX F Model</b>           | 40:0.4                                     | 30:0.75 | 40:0.8 | 20:1.25                                    | 30:1.5 | 20:2.5   | 20:4.0 |
| <b>Frequency</b>             | 40 kHz                                     | 30 kHz  | 40 kHz | 20 kHz                                     | 30 kHz | 20 kHz   | 20 kHz |
| <b>Peak Output Power</b>     | 400 W                                      | 750 W   | 800 W  | 1250 W                                     | 1500 W | 2500 W   | 4000 W |
| <b>Max. Continuous Power</b> | 200 W                                      | 375 W   | 400 W  | 625 W                                      | 750 W  | 1250 W   | 2000 W |
| <b>Max. Current</b>          | 3 A  | 5 A     | 5 A    | 7 A  | 10 A   | 14 A   | 25 A   |
| <b>Supply Voltage</b>        | 180-253 VAC<br>50/60 Hz, 1 PH<br>24VDC, 3A |         |        | 180-253 VAC<br>50/60 Hz, 1 PH<br>24VDC, 3A |        | 180-253 VAC<br>50/60 Hz, 1 PH<br>50/60 Hz, 1 PH<br>24VDC, 3A |        |
| <b>Weight</b>                | 16 lbs. / 7.25 kg                          |         |        | 18 lbs. / 8.16 kg                          |        | 22 lbs. / 10 kg  |        |



#### Americas

Branson Ultrasonics Corp.  
41 Eagle Road  
Danbury, CT 06810, USA  
T: 203-796-0400  
F: 203-796-0450  
www.bransonultrasonics.com

#### Europe

Branson Ultraschall  
Niederlassung der Emerson  
Technologies GmbH & Co. OHG  
Waldstrasse 53-55  
63128 Dietzenbach, Germany  
T: +49-6074-497-0  
F: +49-6074-497-199  
www.branson.eu

#### Asia

Branson Ultrasonics (Shanghai) Co., Ltd.  
758 Rong Le Dong Road  
Song Jiang, Shanghai, PRC, 201613  
T: 86-21-3781-0588  
F: 86-21-5774-5100  
www.branson.com.cn