ClampMAX[®]

A resiliant clamping solution for modern machine tool applcations.





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WHY ClampMAX®

All World's ClampMAX[®] system is available in many configurations to meet your work-holding requirements. All World has partnered with IFM to bring you smart devices that are IOT ready. These components help to minimize labor costs to build, and simplify troubleshooting for your maintenance staff. Our systems can offer you up to six separate valve operations on one unit, and can offer individual or both "A" and "B" pressure line monitoring.

Our ClampMAX_® units make use of the "All World Booster Technology" which is an in-stack type hydraulic booster. This configuration boosts the line pressure only in the "A" port minimizing leakage potential while increasing safety of operation. These devices come in both holding pressure type for no-leak holding, or auto-venting for zero line energy when the system is shut down. Booster-type systems come with a pressure type in-line 10 micron filter to ensure clean oil in your system. The operating ranges using All World's booster tech are from 1,000 psi to 5,000 psi. With ClampMAX_® we also offer models which can offer increased flow rates and up to 3,000 psi without booster technology.

225 to 5,000 PSI

The most impressive feature of the ClampMAX_® systems is the hybrid hydraulics technology which is a key component for why ClampMAX_® is so great. Our unit controls motor speed through use of an inverter control system onboard the unit. This provides a quiet and low temperature operating system which is energy efficient, drawing less than ½ amp while holding pressure. Can your system do that today? An IPM motor can generate high torque at a low RPM. This is what allows us to draw such low power and maintain pressure.

Sounds expensive, right? You would be surprised to find out that you can get all of this technology and sophistication for about the same price as the throw away systems you are buying today from other companies that currently make workholding systems.

Be smart. Buy smart.

Let us help you find a solution. Talk to us about your application. We can build units to suit your specific needs. We currently assist OEM's, machine integrators, fixture builders, and work directly with end users.



TECHNOLOGY FOR THE FUTURE

KEYPAD ADJUSTMENTS

Daikin Hybrid Hydraulic Power Units are the only cost-effective units in the world that can be adjusted through an easy-to-use keypad design located on the front of the unit. The keypad HMI that lets the user manually adjust pressure and flow settings on each machine for unparalleled efficiency. Previous and potential failures are easy to monitor through the use of the keypad as a diagnostic tool. The keypad monitors (N) parameters and uses smart technology to alert the user of any problems or failures. The unit will even shut itself off if a catastrophic failure occurs, drastically reducing maintenance times.

ALARM CODES

Daikin Hybrid Hydraulic Systems can make your redundant inspections and inefficiencies go away! With the Hybrid System, electricity consumption and other various information is internally monitored at all times – there's no need for periodic inspections. For greater mobility, alarm readouts can be transferred straight from the unit to a laptop or tablet with USB ports. Triggered alarm codes tell you exactly the reason for maintenance and how the problem can be resolved.

These features greatly contribute to the reduction of man-hours for inspection and corrections. Through these methods, downtime is minimal as long as the user corrects the problem by taking the appropriate preventative action.





HYBRID-WIN PROGRAMMING

Hybrid-Win is utility software to monitor the internal status of Daikin hybrid systems using a PC. The software and its instruction manual can be downloaded from the website "http://www.daikinpmc.com/" free of charge by completing the user registration process. This PC utility reads data from Daikin hybrid systems and manages it. Parameter setting and monitoring can be accomplished efficiently using the Windows application. Special cables are required.

The pressure, flow rate, and other internal data of the inverter can be monitored and displayed in the form of graphs. This facilitates operation checks during test runs, adjustment of parameters such as time constants and troubleshooting.

The time required for set-up can be slashed by editing the parameter settings on the PC and writing them to the unit in a batch. The ability to read and save settings facilitates management. To speed up your readings, you can program the software to save the alarm history. This function enables quick identification of the parts that require maintenance and reduction of the downtime. The operating time display can serve as the guide for the timing to replace consumable parts or to conduct maintenance. Troubleshooting information including the diagnosis results of the cause of an alarm and action to take can be displayed.

ENERGY SAVINGS

ENERGY Lower energy consumption through advanced inverter technology provides longer unit life, reduced energy cost, and sustainable savings. Average reduction of 60-70%.

HEAT A reduction of heat generation creates longer life for machine components and reduces ambient workspace temperatures, resulting in reduced air conditioning demand and fewer opportunities for overheating. Average reduction from 104°F to 70°F.

OIL Conventional hydraulic units require larger capacity tanks to dissipate heat than Daikin power units, which reduce oil disposal. Average reduction of 33-80%.

NOISE Noise reduction creates a more comfortable and safe work environment, reducing worry and cutting cost on factory alarms. Average reduction from 75 dBA to 50 dBA.

STOCK Compatibility and adaptability creates less need for on-hand stock, as Daikin power units work as a drop-in replacement for the vast majority of hydraulic pumps and motors within the industrial marketplace.



ACU-A-1-B-1-B-1-A-1-AWM		
Description	Quantity	
Eco-Rich #40 Series Hydraulic Unit Kit	1	
Manifold Bracket	1	
D03 Parallel 2 Sta. Alum. Manifold Kit	1	
IFM Wiring Block Kit	1	
#10 SAE Port Fittings	4	
Pressure Line and Return Line Plumbed to Manifold	1	
ClampMAX Filter Kit	1	
KSO-G02-2CP-30-EN Valve Kit	2	
D03 in Stack 3.4:1 Prop. D.A. Valve Type Booster	2	
Single IFM Switch Kit, Aluminum	2	



	nonifications	Model
Specifications		ACU-A-1-B-1-A-1-AWM
	Max Flow	No Load: 4 gal/min (15 l/min)
		Under Pressure: 0.5 gal/min (2.2 l/min)
Pump Unit	Max Pressure	3400 PSI (0-23.5 MPa)
	Flow Adjustment Range	0- 4 gal/min (0-15 l/min)
	Operating Pressure Adjustment Range	0-3400 PSI (0 - 23.5 MPa)
	Motor	2.2 kW
Power Required	Motor/Pump Unit	3 phase, AC 200V (50Hz), 200 V (60Hz), 220V (60Hz) (permissible voltage fluction +/- 10%
Dura Datad	AC 3 phase, 200V (50Hz)	4.7 A
Current	AC 3 phase, 200V (60Hz)	4.5 A
	AC 3 phase 220V (60Hz)	4.3 A
No Fus	e Breaker Capacity	15 A
Exte	External Input Signal 3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channels)	
External Output		1 channel, photo coupler insulation, open collector output
Signal	Digital Output	DC 24 V, 50mA maximum per channel
oigitai	Contact Output	1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact
Usable Oil		Mineral - oil base hydraulic oil viscosity grade ISO VG32-VG68
Τ	ank Oil Temp	0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C)
Operating	Ambient Temperature	0 - 40 °C
Stora	ge Ambient Temp	-20 to 60 °C
	Humidity	85% RH maximum (no condensation)
In	stallation Site	Indoors (secured with bolts, etc.)
Altitude		1000 m maximum
Nu	mber of Valves	2
		AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 W
Power Req'd for Each Valve		AC 200 V Coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W
		*DC 24 V: Starting amps, Holding current 1.22 A, Holding Power 29.2 W
Manifold Material		Aluminum
-8 SAE A & B ports		-8 SAE A & B ports
# of Digita	# of Digital Pressure Switches 2	
Va	alve Actuation	*Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.



ACU-A-2-D-1-B-1-A-1-AWM		
Description	Quantity	
Eco-Rich #40 Series Hydraulic Unit Kit	1	
Manifold Bracket	1	
D03 Parallel 4 Sta. Alum. Manifold Kit	1	
IFM Wiring Block Kit	2	
#10 SAE Port Fittings	8	
Pressure Line and Return Line Plumbed to Manifold	1	
ClampMAX Filter Kit	1	
KSO-G02-2CP-30 EN Valve Kit	4	
D03 in Stack 3.4:1 Prop. D.A. Valve Type Booster	4	
Single IFM Switch Kit, Aluminum	4	



Specifications Model ACU-A-2D-1B-1-A-1AWM ACU-A-2D-1B-1-A-1-AWM No Load: 4 gal/min (15 l/min) No Load: 4 gal/min (2.2 l/min) Max Pressure 3/d00 PSI (0-23.5 MPa) Flow Adjustment Range 0-4 gal/min (0-15 l/min) Operating Pressure 0-3400 PSI (0-23.5 MPa) Adjustment Range 0-3400 VSI (0-23.5 MPa) Motor 2.2 kW Power Required Motor/Pump Unit AC 3 phase, 200V (50Hz) 4.7 A AC 3 phase, 200V (50Hz) 4.5 A AC 3 phase, 200V (50Hz) 4.5 A External Output Digital Output 1 channel, photo coupler insulation, open collector output DC 24V, 50mA maximum per channel) 1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact Usable Oil Mineral - oil base hydraulic oil viscosity grade ISO VG32-VG68 Tank Oil Temp 0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C) Operating Ambient Temp<			
ACU-A-2-0-1-B-1-Ar-AWM Not Load: 4 gal/min (15 l/min) Max Flow Not Load: 4 gal/min (15 l/min) Max Pressure 3400 PSI (0-23.5 MPa) Flow Adjustment Range 0 - 4 gal/min (0-15 l/min) Operating Pressure Adjustment Range 0.3400 PSI (0-23.5 MPa) Motor 2.2 kW Power Required Motor/Pump Unit 3 phase, AC 200V (50Hz), 200 V (60Hz), 220V (60Hz) Pump Rated Current AC 3 phase, 200V (50Hz) 4.7 A AC 3 phase, 200V (50Hz) 4.5 A AC 3 phase, 200V (50Hz) 4.5 A AC 3 phase, 200V (50Hz) 4.5 A External Input Signal 3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel) External Output Signal Digital Output Di c24V, 50mA maximum per channel Digital Output 1 channel, photo coupler insulation, peen collector output Di contact Output 1 channel, onit base hydraulic oil viscosity grade ISO VG3V-23VG68 Tank Oil Temp 0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C) Operating Ambient Temperature 0 - 00 °C Grade Abient Temperature 0 - 00 °C 4 C 100 V coils: Starting amps4 Holding current 0.51 A, Holding power 21.5 W	Specifications		Model
Max Flow No Load: 4 gal/min (15 Vmin) Under Pressure: 0.5 gal/min (2.2 Vmin) Max Pressure 3400 PSI (0-23.5 MPa) Flow Adjustment Range 0-4 gal/min (0-15 Vmin) Operating Pressure Adjustment Range 0-3400 PSI (0-23.5 MPa) Motor 2.2 kW Power Required Current Motor/Pump Unit 3 phase, AC 200V (50Hz), 220V (60Hz), 220V (60Hz) AC 3 phase, 200V (50Hz) 4.7 A Pump Rated Current AC 3 phase, 200V (60Hz) 4.7 A AC 3 phase, 200V (60Hz) 4.7 A Pump Rated Current AC 3 phase, 200V (60Hz) 4.7 A Pump Rated Current Despect Strate Case Strate Case Strate Bester Capacity 15 A 5 A External Input Signal 3 channels, photo coupler insulation, open collector output Digital Output DC 24 V, 50mA maximum per channel) External Output Digital Output DC 30 V, 14 (resistance load), 1 common contact Usable Oil Mintenel, relay output, contact capacity. DC 30 V, 14 (resistance load), 1 common contact Usable Oil Mintenel, relay output, contact capacity. DC 30 V, 14 (resistance load), 1 common contact Usable Oil Mintenel, relay output, contact capac			ACU-A-2-D-1-B-1-A-1-AWM
Hash Row Under Pressure 36 400 PSI (0-23.5 MPa) Pump Unit Max Pressure 3400 PSI (0-23.5 MPa) Flow Adjustment Range 0-4 gal/min (0.15 /min) Operating Pressure 0 Adjustment Range 0-3400 PSI (0-23.5 MPa) Power Required Motor 2.2 kW Power Required Motor/Pump Unit 3 phase, AC 200V (50Hz), 200 V (60Hz), 220V (60Hz) Pump Rated AC 3 phase, 200V (50Hz) 4.7 A AC 3 phase, 200V (60Hz) 4.5 A AC 3 phase 200V (60Hz) 4.5 A AC 3 phase 200V (60Hz) 4.5 A External Unput Signal 3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel) External Output Digital Output DC 24V, SomA maximum per channel) External Output 1 channel, photo coupler insulation, open collector output Digital Output Digital Output DC 24V, SomA maximum per channel) Tank Oil Temp 0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C) Operating Ambient Temperature -0 + 0 °C Oto 80 degrees C (recommended operating temperature range : 15 to 50 °C) Operating Ambient Temperature		Max Flow	No Load: 4 gal/min (15 l/min)
Pump Unit Max Pressure 3400 PSI (0-23.5 MPa) Flow Adjustment Range 0-4 gal/min (0-15 l/min) Operating Pressure Adjustment Range 0-3400 PSI (0-23.5 MPa) Power Required Motor 2.2 kW Power Required Current Motor/Pump Unit 3 phase, AC 200V (50Hz), 200 V (60Hz), 220V (60Hz) (permissible voltage fluction +/- 10% AC 3 phase, 200V (60Hz) 4.7 A Pump Rated Current AC 3 phase, 200V (60Hz) 4.5 A AC 3 phase, 200V (60Hz) 4.3 A No Fuse Breaker Capacity 15 A External Input Signal 3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel) External Output Signal Digital Output D channel, photo coupler insulation, open collector output DC 24 V, SomA maximum per channel Signal Contact Output 1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact Usable OII Mineral - oil base hydraulic ol viscosity grade ISO VG32 CO Operating Ambient Temperature 0-40 °C C Operating Ambient Temperature 0 -40 °C Mumidity 85% RH maximum (no condensation) Matifold Material Numb		Max 110W	Under Pressure: 0.5 gal/min (2.2 l/min)
Flow Adjustment Range 0-4 gal/min (0-15 l/min) Operating Pressure Adjustment Range 0-3400 PSI (0 - 23.5 MPa) Wotor 2.2 kW Power Required Motor/Pump Unit 3 phase, AC 200V (50Hz), 200 V (60Hz), 220V (60Hz) Pump Rated Current AC 3 phase, 200V (50Hz) 4.7 A AC 3 phase, 200V (60Hz) 4.7 A AC 3 phase 200V (60Hz) 4.3 A No Fuse Breaker Capacity 15 A External Input Signal 3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel) External Output Signal 1 channel, relay output, cortact capacity. DC 30 V, 1A (resistance load), 1 common contact Usable Oil Mineral - oil base hydraulic oil viscosity grade ISO VG32-VG68 Tank Oil Temp 0 to 60 degrees C (recommende operating temperature range : 15 to 50 °C) Operating Ambient Temp -20 to 60 °C Humidity 85% RH maximum (no condensation) Installation Site Indoors (secured with bolts, etc.) Altitude 1000 m maximum Number of Valves 4 AC 20 V Coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W Yoto 24 V: Starting amps 1.21, Holding current 1.22 A, Holding power 21.5 W	Pump Unit	Max Pressure	3400 PSI (0-23.5 MPa)
Operating Pressure Adjustment Range 0-3400 PSI (0 - 23.5 MPa) Motor 2.2 kW Power Required Motor/Pump Unit 3 phase, AC 200V (50Hz), 200V (60Hz), 220V (60Hz) (permissible voltage fluction +/- 10% Pump Rated Current AC 3 phase, 200V (50Hz) 4.7 A AC 3 phase, 200V (60Hz) 4.5 A External Input Signal 3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel) External Output Digital Output DC 24 V, 50mA maximum per channel Signal Contact Output 1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact Usable Oil Mineral - oil base hydraulic oil viscosity grade ISO VG32-VG68 Tank Oil Temp 0 to 60 degrees C (recommeded operating temperature range : 15 to 50 °C) Operating Ambient Temperature 0 to 60 degrees C (recommeded operating temperature range : 15 to 50 °C) Operating Ambient Temp -20 to 60 °C Humidity 85% RH maximum (no condensation) Installation Site Indoor	r unip onic	Flow Adjustment Range	0- 4 gal/min (0-15 l/min)
Adjustment Range 0-3400 PSI (0 - 23.5 MPa) Motor 2.2 kW Power Required Motor/Pump Unit 3 phase, AC 200V (50Hz), 200 V (50Hz), 220V (50Hz) Pump Rated Current AC 3 phase, 200V (50Hz) 4.7 A AC 3 phase, 200V (50Hz) 4.5 A AC 3 phase, 200V (50Hz) 4.5 A AC 3 phase, 200V (50Hz) 4.3 A No Fuse Breaker Capacity 15 A External Input Signal 3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel) External Output Signal Digital Output D C24 V, 50mA maximum per channel Contact Output 1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact Usable Oil Mineral - oil base hydraulic oil viscosity grade ISO VG32-VG68 Tank Oil Temp 0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C) Operating Ambient Temp -20 to 60 °C Humidity 85% RH maximum (no condensation) Installation Site Indoors (secured with bolts, etc.) AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 W AC 200 V Coils: Starting amps 2.4 A, Bolding power 21.5 W AC 200 V Coils: S		Operating Pressure	
Motor 2.2 kW Power Required Motor/Pump Unit 3 phase, AC 200V (50Hz), 200 V (60Hz), 220V (60Hz) Pump Rated Current AC 3 phase, 200V (50Hz) 4.7 A AC 3 phase, 200V (60Hz) 4.5 A AC 3 phase, 200V (60Hz) 4.5 A AC 3 phase 220V (60Hz) 4.3 A No Fuse Breaker Capacity 15 A External Input Signal 3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel) I channel, photo coupler insulation, open collector output DC24V, 50mA maximum per channel Signal 1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact Vable Oil Mineral - oil base hydraulic oil viscosity grade 1SO VG32-VG68 Tank Oil Temp 0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C) Operating Ambient Temperature 0 - 40 °C Storage Ambient Temp -20 to 60 °C Humidity 85% RH maximum (no condensation) Installation Site Indoors (secured with bolts, etc.) Attitude 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding power 21.5 W Power Req'd for Each Valve AC 100 V coils: Starting amps, Holding current 0.26 A, Holding power 21		Adjustment Range	0-3400 PSI (0 - 23.5 MPa)
Power Required Motor/Pump Unit 3 phase, AC 200V (50Hz), 200V (60Hz), 220V (60Hz) (permissible voltage fluction +/- 10% Pump Rated Current AC 3 phase, 200V (50Hz) 4.7 A AC 3 phase, 200V (60Hz) 4.5 A AC 3 phase, 200V (60Hz) 4.3 A No Fuse Breaker Capacity 15 A External Input Signal 3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel) Digital Output Signal Digital Output 1 channel, relay output, contact capacity: DC 30 V, 1 A (resistance load), 1 common contact DC 24 V, 50mA maximum per channel External Output Signal Value Ambient Temperature 0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C) Operating Ambient Temp -20 to 60 °C -20 to 60 °C Humidity S5% RH maximum (no condensation) -20 to 60 °C Humidity Cat 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding power 21.5 W AC 200 V Coils: Starting amps -, Holding current 0.26 A, Holding power 21.5 W AC 200 V Coils: Starting amps -, Holding current 0.26 A, Holding power 22.5 W Mumber of Valves		Motor	2.2 kW
Power Required Introduction full point (permissible voltage fluction +/- 10% Pump Rated Current AC 3 phase, 200V (50Hz) 4.7 A AC 3 phase, 200V (60Hz) 4.5 A AC 3 phase, 200V (60Hz) 4.3 A AC 3 phase 220V (60Hz) 4.3 A AC 3 phase 220V (60Hz) 4.3 A AC 3 phase 220V (60Hz) 4.3 A External Input Signal 3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel) External Output Signal Digital Output 1 channel, photo accupter insulation, open collector output Digital Output 1 channel, relay output, contact capacity: DC 30 V, 14 (resistance load), 1 common contact Usable Oil Mineral - oil base hydraulic oil viscosity grade ISO VG32-VG68 Tank Oil Temp 0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C) Operating Ambient Temp -20 to 60 °C Humidity 85% RH maximum (no condensation) Installation Site Indoors (secured with bolts, etc.) Altitude 1000 m maximum Number of Valves 4 AC 100 V coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W * AC 200 V Coils: Starting amps 1.21, Hol		Motor/Bump Unit	3 phase, AC 200V (50Hz), 200 V (60Hz), 220V (60Hz)
AC 3 phase, 200V (50Hz) 4.7 A AC 3 phase, 200V (60Hz) 4.5 A AC 3 phase, 200V (60Hz) 4.5 A AC 3 phase 220V (60Hz) 4.3 A No Fuse Breaker Capacity 15 A External Input Signal 3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel) External Output Digital Output 1 channel, photo coupler insulation, open collector output DC 24 V, 50mA maximum per channel External Output Digital Output 1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact Usable Oil Mineral - oil base hydraulic oil viscosity grade ISO VG32-VG68 Tank Oil Temp 0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C) Operating Ambient Temperature 0 - 40 °C Storage Ambient Temp -20 to 60 °C Humidity 85% RH maximum (no condensation) Installation Site Indoors (secured with bolts, etc.) Act 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 W Power Req'd for Each Valve AC 100 V coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W *DC 24 V: Starting amps -, Holding current 1.22 A, Holding Power 21.5 W *DC 24 V: Starting amps -, Alolding current 1.22 A,	Power Required	Motor/Pump onit	(permissible voltage fluction +/- 10%
Pump Hated Current AC 3 phase, 200V (60Hz) 4.5 A AC 3 phase 220V (60Hz) 4.3 A No Fuse Breaker Capacity 15 A External Input Signal 3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel) External Output Signal Digital Output 0 2 4 V, 50mA maximum per channel Contact Output 1 channel, photo coupler insulation, OC24V, (Max of 27VDC, 5 mA per channel) External Output Digital Output 0 2 4 V, 50mA maximum per channel Signal Contact Output 1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact Usable Oil Mineral - oil base hydraulic oil viscosity grade ISO VG32-VG68 Tank Oil Temp 0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C) Operating Ambient Temperature 0 - 40 °C Storage Ambient Temp -20 to 60 °C Humidity 85% RH maximum (no condensation) Installation Site Indoors (secured with bolts, etc.) Altitude 1000 m maximum Number of Valves 4 AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 W AC 200 V Coils: Starting amps, Holding current 0.26 A, Holding		AC 3 phase, 200V (50Hz)	4.7 A
AC 3 phase 220V (60Hz) 4.3 A No Fuse Breaker Capacity 15 A External Input Signal 3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel) External Output Signal Digital Output 1 channel, photo coupler insulation, open collector output DC 24 V, 50mA maximum per channel External Number of Valves 0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C) Operating Ambient Temperature 0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C) Operating Ambient Temperature 0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C) Installation Site Indoors (secured with bolts, etc.) Attitude 1000 m maximum Number of Valves 4 AC 100 V coils: Starting amps 2.4 A, Holding Power 21.5 W 'C20 V Coils: Starting amps 1.21, Holding Power 29.2 W Manifold Material Aluminum Port Size -8 SAE A & B ports # of Digital Pressure Switches 4 Valve Actuation Custom options available upon request.	Current	AC 3 phase, 200V (60Hz)	4.5 A
No Fuse Breaker Capacity 15 A External Input Signal 3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel) External Output Signal Digital Output 1 channel, photo coupler insulation, open collector output DC 24 V, 50mA maximum per channel External Number of Valses 1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact Usable Oil Mineral - oil base hydraulic oil viscosity grade ISO VG32-VG68 Tank Oil Temp 0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C) Operating Ambient Temperature 0 - 40 °C Storage Ambient Temp -20 to 60 °C Humidity 85% RH maximum (no condensation) Installation Site Indoors (secured with bolts, etc.) Altitude 1000 m maximum Number of Valves 4 AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 W *DC 24 V: Starting amps, Holding current 0.26 A, Holding power 21.5 W *DC 24 V: Starting amps, Holding current 1.22 A, Holding Power 29.2 W Manifold Material Aluminum Port Size -8 SAE A & B ports # of Digital Pressure Switches 4 'Standard Unit: double solenoid, 2		AC 3 phase 220V (60Hz)	4.3 A
External Input Signal 3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel) External Output Signal Digital Output 1 channel, photo coupler insulation, open collector output DC 24 V, 50mA maximum per channel Usable Oil 1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact Usable Oil 1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact Operating Ambient Temp 0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C) Operating Ambient Temperature 0 - 40 °C Storage Ambient Temp -20 to 60 °C Humidity 85% RH maximum (no condensation) Installation Site Indoors (secured with bolts, etc.) Altitude 1000 m maximum Number of Valves 4 AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 W AC 200 V Coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W *DC 24 V: Starting amps, Holding current 1.22 A, Holding Power 29.2 W Manifold Material Aluminum Port Size -8 SAE A & B ports # of Digital Pressure Switches 4 Valve Actuation 4	No Fus	No Fuse Breaker Capacity 15 A	
External Output Signal Digital Output 1 channel, photo coupler insulation, open collector output DC 24 V, 50mA maximum per channel Contact Output 1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact Usable Oil Mineral - oil base hydraulic oil viscosity grade ISO VG32-VG68 Tank Oil Temp 0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C) Operating Ambient Temperature 0 - 40 °C Storage Ambient Temp -20 to 60 °C Humidity 85% RH maximum (no condensation) Installation Site Indoors (secured with bolts, etc.) Altitude 1000 m maximum Number of Valves 4 AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 W Req'd for Each Valve *DC 24 V: Starting amps, Holding current 0.26 A, Holding power 21.5 W Manifold Material AL 100 V coils: Starting amps, Holding current 1.22 A, Holding Power 29.2 W Manifold Material Aluminum Port Size -8 SAE A & B ports # of Digital Pressure Switches 4 *Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.	Exte	rnal Input Signal	3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel)
External Output Signal Digital Output Dic 24 V, 50mA maximum per channel Signal Contact Output 1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact Usable Oil Mineral - oil base hydraulic oil viscosity grade ISO VG32-VG68 Tank Oil Temp 0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C) Operating Ambient Temperature 0 - 40 °C Storage Ambient Temp -20 to 60 °C Humidity 85% RH maximum (no condensation) Installation Site Indoors (secured with bolts, etc.) Altitude 1000 m maximum Number of Valves 4 AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding power 21.5 W *DC 24 V: Starting amps, Holding current 0.26 A, Holding power 21.5 W *DC 24 V: Starting amps, Holding current 1.22 A, Holding Power 29.2 W Manifold Material Aluminum Port Size -8 SAE A & B ports # of Digital Pressure Switches 4 Valve Actuation *Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.	External Output		1 channel, photo coupler insulation, open collector output
SignalContact Output1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contactUsable OilMineral - oil base hydraulic oil viscosity grade ISO VG32-VG68Tank Oil Temp0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C)Operating Ambient Temperature0 - 40 °CStorage Ambient Temp-20 to 60 °CHumidity85% RH maximum (no condensation)Installation SiteIndoors (secured with bolts, etc.)Altitude1000 m maximumNumber of Valves4AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 WAC 200 V Coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W*DC 24 V: Starting amps, Holding current 1.22 A, Holding Power 29.2 WManifold MaterialAluminumPort Size-8 SAE A & B ports# of Digital Pressure Switches4Valve Actuation4	External Output	Digital Output	DC 24 V, 50mA maximum per channel
Usable OilMineral - oil base hydraulic oil viscosity grade ISO VG32-VG68Tank Oil Temp0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C)Operating Ambient Temperature0 - 40 °CStorage Ambient Temp-20 to 60 °CHumidity85% RH maximum (no condensation)Installation SiteIndoors (secured with bolts, etc.)Altitude1000 m maximumNumber of Valves4Power Req'd for Each ValveAC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 WManifold MaterialAC 200 V Coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W* DC 24 V: Starting amps, Holding current 1.22 A, Holding Power 29.2 WManifold MaterialAluminumPort Size-8 SAE A & B ports# of Digital Pressure Switches4Valve Actuation*Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.	Signal	Contact Output	1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact
Tank Oil Temp0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C)Operating Ambient Temperature0 - 40 °CStorage Ambient Temp-20 to 60 °CHumidity85% RH maximum (no condensation)Installation SiteIndoors (secured with bolts, etc.)Altitude1000 m maximumNumber of Valves4Power Req'd for Each ValveAC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 WPower Req'd for Each ValveAC 200 V Coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 WPort Size		Usable Oil	Mineral - oil base hydraulic oil viscosity grade ISO VG32-VG68
Operating Ambient Temperature0 - 40 °CStorage Ambient Temp-20 to 60 °CHumidity85% RH maximum (no condensation)Installation SiteIndoors (secured with bolts, etc.)Altitude1000 m maximumNumber of Valves4Power Req'd for Each ValveAC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 WAC 200 V Coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 WManifold MaterialAC 200 V Coils: Starting amps, Holding current 1.22 A, Holding Power 29.2 WManifold MaterialAluminumPort Size-8 SAE A & B ports# of Digital Pressure Switches4Valve Actuation*Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.	T	ank Oil Temp	0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C)
Storage Ambient Temp -20 to 60 °C Humidity 85% RH maximum (no condensation) Installation Site Indoors (secured with bolts, etc.) Altitude 1000 m maximum Number of Valves 4 Power Req'd for Each Valve AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 W Power Req'd for Each Valve AC 200 V Coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W *DC 24 V: Starting amps, Holding current 1.22 A, Holding Power 29.2 W Manifold Material Aluminum Port Size -8 SAE A & B ports # of Digital Pressure Switches 4 Valve Actuation *Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.	Operating	Ambient Temperature	0 - 40 °C
Humidity 85% RH maximum (no condensation) Installation Site Indoors (secured with bolts, etc.) Altitude 1000 m maximum Number of Valves 4 Power Req'd for Each Valve AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 W Power Req'd for Each Valve AC 200 V Coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W Manifold Material AC 200 V Coils: Starting amps, Holding current 1.22 A, Holding Power 29.2 W Manifold Material Aluminum Port Size -8 SAE A & B ports # of Digital Pressure Switches 4 *Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.	Stora	ge Ambient Temp	-20 to 60 °C
Installation Site Indoors (secured with bolts, etc.) Altitude 1000 m maximum Number of Valves 4 Power Req'd for Each Valve AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 W Power Req'd for Each Valve AC 200 V Coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W *DC 24 V: Starting amps, Holding current 1.22 A, Holding Power 29.2 W Manifold Material Aluminum Port Size -8 SAE A & B ports # of Digital Pressure Switches 4 Valve Actuation *Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.		Humidity	85% RH maximum (no condensation)
Altitude 1000 m maximum Number of Valves 4 AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 W Power Req'd for Each Valve AC 100 V coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W Manifold Material *DC 24 V: Starting amps, Holding current 1.22 A, Holding Power 29.2 W Manifold Material Aluminum Port Size -8 SAE A & B ports # of Digital Pressure Switches 4 Valve Actuation *Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.	In	stallation Site	Indoors (secured with bolts, etc.)
Number of Valves 4 Power Req'd for Each Valve AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 W Power Req'd for Each Valve AC 200 V Coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W *DC 24 V: Starting amps, Holding current 1.22 A, Holding Power 29.2 W Manifold Material Aluminum Port Size -8 SAE A & B ports # of Digital Pressure Switches 4 Valve Actuation *Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.		Altitude	1000 m maximum
AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 W Power Req'd for Each Valve AC 200 V Coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W *DC 24 V: Starting amps, Holding current 1.22 A, Holding Power 29.2 W Manifold Material Aluminum Port Size -8 SAE A & B ports # of Digital Pressure Switches 4 Valve Actuation *Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.	Nu	mber of Valves	4
Power Req'd for Each Valve AC 200 V Coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W *DC 24 V: Starting amps, Holding current 1.22 A, Holding Power 29.2 W Manifold Material Aluminum Port Size -8 SAE A & B ports # of Digital Pressure Switches 4 Valve Actuation Custom options available upon request.			AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 W
*DC 24 V: Starting amps, Holding current 1.22 A, Holding Power 29.2 W Manifold Material Aluminum Port Size -8 SAE A & B ports # of Digital Pressure Switches 4 Valve Actuation *Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.	Power Req'd for Each Valve		AC 200 V Coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W
Manifold Material Aluminum Port Size -8 SAE A & B ports # of Digital Pressure Switches 4 Valve Actuation *Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.			*DC 24 V: Starting amps, Holding current 1.22 A, Holding Power 29.2 W
Port Size -8 SAE A & B ports # of Digital Pressure Switches 4 Valve Actuation *Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.	Manifold Material		Aluminum
# of Digital Pressure Switches 4 Valve Actuation *Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.	Port Size		-8 SAE A & B ports
Valve Actuation *Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.	# of Digit	# of Digital Pressure Switches 4	
	Va	alve Actuation	*Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.





ACU-A-4-B-1-B-2-A-1-AWM		
Description	Quantity	
Eco-Rich #40 Series Hydraulic Unit Kit	1	
Manifold Bracket	1	
D03 Parallel 2 Sta. Ductile Manifold Kit	1	
IFM Wiring Block Kit	1	
#10 SAE Port Fittings	4	
Pressure Line and Return Line Plumbed to Manifold	1	
ClampMAX Filter Kit	1	
KSO-G02-2CP-30 EN Valve Kit	2	
D03 in Stack 5.0:1 Prop. D.A. Valve Type Booster	2	
Single IFM Switch Kit, Ductile	2	



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Specifications		Model	
	-	ACU-A-4-B-1-B-2-A-1-AWM	
	Max Flow	No Load: 3.5 gal/min (14 l/min)	
		Under Pressure: 0.33 gal/min (1.4 l/min)	
Pump Unit	Max Pressure	5000 PSI (0-35 MPa)	
	Flow Adjustment Range	0- 3.5 gal/min (0-14 l/min)	
	Operating Pressure		
	Adjustment Range	0-5000 PSI (0 - 35 MPa)	
	Motor	2.2 kW	
	Motor/Pump Unit	3 phase, AC 200V (50Hz), 200 V (60Hz), 220V (60Hz)	
Power Required		(permissible voltage fluction +/- 10%	
Dump Dated	AC 3 phase, 200V (50Hz)	4.7 A	
Current	AC 3 phase, 200V (60Hz)	4.5 A	
	AC 3 phase 220V (60Hz)	4.3 A	
No Fus	No Fuse Breaker Capacity 15 A		
Exte	rnal Input Signal	3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel)	
External Output		1 channel, photo coupler insulation, open collector output	
Signal	Digital Output	DC 24 V, 50mA maximum per channel	
Signal	Contact Output	1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact	
	Usable Oil	Mineral - oil base hydraulic oil viscosity grade ISO VG32-VG68	
Т	ank Oil Temp	0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C)	
Operating	Ambient Temperature	0 - 40 °C	
Stora	ge Ambient Temp	-20 to 60 °C	
	Humidity	85% RH maximum (no condensation)	
In	stallation Site	Indoors (secured with bolts, etc.)	
Altitude		1000 m maximum	
Nu	mber of Valves	2	
		AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 W	
Power Req'd for Each Valve		AC 200 V Coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W	
·		*DC 24 V: Starting amps Holding current 1 22 A. Holding Power 29 2 W	
Manifold Material		Ductile iron	
Port Size		-8 SAE A & B ports	
# of Digit	# of Digital Pressure Switches 2		
Va	alve Actuation	*Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.	

ACU-A-5-D-1-B-2-A-1-AWM		
Description	Quantity	
Eco-Rich #40 Series Hydraulic Unit Kit	1	
Manifold Bracket	1	
D03 Parallel 4 Sta. Ductile Manifold Kit	1	
IFM Wiring Block Kit	4	
#10 SAE Port Fittings	8	
Pressure Line and Return Line Plumbed to Manifold	1	
ClampMAX Filter Kit	1	
KSO-G02-2CP-30 EN Valve Kit	4	
D03 in Stack 5.0:1 Prop. D.A. Valve Type Booster	4	
Single IFM Switch Kit, Ductile	4	



Specifications		Model	
		ACU-A-5-D-1-B-2-A-1-AWM	
	Max Flow	No Load: 3.5 gal/min (14 l/min)	
		Under Pressure: 0.33 gal/min (1.4 l/min)	
Pump Unit	Max Pressure	5000 PSI (0-35 MPa)	
i unip onic	Flow Adjustment Range	0- 3.5 gal/min (0-14 l/min)	
	Operating Pressure		
	Adjustment Range	0-5000 PSI (0 - 35 MPa)	
	Motor	2.2 kW	
	Motor/Pump Unit	3 phase, AC 200V (50Hz), 200 V (60Hz), 220V (60Hz)	
Power Required		(permissible voltage fluction +/- 10%	
Dura Data d	AC 3 phase, 200V (50Hz)	4.7 A	
Current	AC 3 phase, 200V (60Hz)	4.5 A	
	AC 3 phase 220V (60Hz)	4.3 A	
No Fus	e Breaker Capacity	15 A	
Exte	rnal Input Signal	3 channels, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per channel)	
		1 channel, photo coupler insulation, open collector output	
External Output	Digital Output	DC 24 V, 50mA maximum per channel	
Sigilai	Contact Output	1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact	
	Usable Oil	Mineral - oil base hydraulic oil viscosity grade ISO VG32-VG68	
Ta	ank Oil Temp	0 to 60 degrees C (recommended operating temperature range : 15 to 50 °C)	
Operating	Ambient Temperature	0 - 40 °C	
Stora	ge Ambient Temp	-20 to 60 °C	
	Humidity	85% RH maximum (no condensation)	
In	stallation Site	Indoors (secured with bolts, etc.)	
	Altitude	1000 m maximum	
Nui	mber of Valves	4	
Power Req'd for Each Valve		AC 100 V coils: Starting amps 2.4 A, Holding current 0.51 A, Holding Power 21.5 W	
		AC 200 V Coils: Starting amps 1.21, Holding current 0.26 A, Holding power 21.5 W	
		*DC 24 V: Starting amps, Holding current 1.22 A, Holding Power 29.2 W	
Ма	Manifold Material Ductile iron		
-8 SAE A & B ports		-8 SAE A & B ports	
# of Digita	al Pressure Switches	4	
Va	alve Actuation	*Standard Unit: double solenoid, 24VDC Coils, closed center when de-energized. Custom options available upon request.	







ACU-C-1-B-1-B-X-A-4-AWM		
Description	Quantity	
ClampMAX Super Unit Series Hydraulic Unit	1	
Manifold Bracket	1	
D03 Parallel 2 Sta. Aluminum Manifold Kit	1	
IFM Wiring Block Kit	1	
#10 SAE Port Fittings	4	
Pressure line, and return line plumbed to manifold	1	
KSO-G02-2CP-30 EN Valve Kit	2	
Aluminum, Single IFM Switch Kit	2	

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		Model	
Specifications		ACU-C-1-B-1-B-X-A-4-AWM	
	Max Flow	15 gal/min (60 l/min)	
	Max Pressure	3000 PSI (20.6 MPa)	
Pump Unit	Flow Adjustment Range	2.5 - 15 gal/min (8.7 - 60 l/min)	
	Operating Pressure		
	Adjustment Range	225-3000 PSI (1.5 - 20.6 MPa)	
	Motor	5.0 kW	
Power Req'd	Motor/Pump Unit	3 phase, AC 200V (50Hz), 200 V (60Hz), 220V (60Hz) (permissible voltage fluction +/- 10%)	
Dump Dated	AC 3 phase, 200V (50Hz)	22.1 A	
Current	AC 3 phase, 200V (60Hz)	21.7 A	
	AC 3 phase 220V (60Hz)	20.2 A	
No Fus	e Breaker Capacity	30 A	
Enternal langet Olympic		5 channels	
External input Signal		Photo coupler insulation, DC24V, (Maximum of 27VDC), 50mA per channel	
External	Digital Output	2 channel, photo coupler insulation, FET output, DC 24 V, 50mA maximum per channel	
output signal	Contact Output	1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact	
	Usable Oil	Mineral oil based, hydraulic oil viscosity grade ISO VG32-VG68	
Т	ank Oil Temp	0 to 60 °C (recommended operating temperature range : 15 to 50 °C)	
Operating	Ambient Temperature	0 - 40 °C	
Storage /	Ambient Temperature	-20 to 60 °C	
	Humidity	85% RH maximum (no condensation)	
In	stallation Site	Indoors (secured with bolts, etc.)	
	Altitude	1000 m maximum	
Nu	mber of Valves	2	
		AC 100 V coils: Starting amps 2.4, holding current 0.51 A, holding power 21.5 W	
Power Req'd for Each Valve		AC 200 V Coils: Starting amps 1.21, holding current 0.26 A, holding power 21.5 W	
		*DC 24 V: Starting amps, Holding current 1.22 A, holding power 29.2 W	
Ma	anifold Material	Aluminum	
	Port Size	-8 SAE A & B ports -8 SAE A & B ports	
# of Digit	al Pressure Switches	2	
Va	alve Actuation	*Standard unit: double solenoid, 24VDC coils, closed center when de-energized. Custom options available upon request.	



ACU-C-2-D-1-B-X-A-4-AWM		
Description	Quantity	
ClampMAX Super Unit Series Hydraulic Unit	1	
Manifold Bracket	1	
D03 Parallel 4 Sta. Aluminum Manifold Kit	1	
IFM Wiring Block Kit	2	
#10 SAE Port Fittings	8	
Pressure line, and return line plumbed to manifold	1	
KSO-G02-2CP-30 EN Valve Kit	4	
Aluminum, Single IFM Switch Kit	4	

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	a sifi sali sa s	Model
8	pecifications	ACU-C-2-D-1-B-X-A-4-AWM
	Max Flow	15 gal/min (60 l/min)
	Max Pressure	3000 PSI (20.6 MPa)
Pump Unit	Flow Adjustment Range	2.5 - 15 gal/min (8.7 - 60 l/min)
	Operating Pressure Adjustment Range	225-3000 PSI (1.5 - 20.6 MPa)
	Motor	5.0 kW
Power Req'd	Motor/Pump Unit	3 phase, AC 200V (50Hz), 200 V (60Hz), 220V (60Hz) (permissible voltage fluction +/- 10%)
During Data d	AC 3 phase, 200V (50Hz)	22.1 A
Current	AC 3 phase, 200V (60Hz)	21.7 A
	AC 3 phase 220V (60Hz)	20.2 A
No Fus	e Breaker Capacity	30 A
Evto	rnal Input Signal	5 channels
LAIG	inai input Signai	Photo coupler insulation, DC24V, (Maximum of 27VDC), 50mA per channel
External	Digital Output	2 channel, photo coupler insulation, FET output, DC 24 V, 50mA maximum per channel
output signal	Contact Output	1 channel, relay output, contact capacity: DC 30 V, 1A (resistance load), 1 common contact
	Usable Oil	Mineral oil based, hydraulic oil viscosity grade ISO VG32-VG68
Т	ank Oil Temp	0 to 60 °C (recommended operating temperature range : 15 to 50 °C)
Operating	Ambient Temperature	0 - 40 °C
Storage /	Ambient Temperature	-20 to 60 °C
	Humidity	85% RH maximum (no condensation)
In	stallation Site	Indoors (secured with bolts, etc.)
	Altitude	1000 m maximum
Nu	mber of Valves	4
		AC 100 V coils: Starting amps 2.4, holding current 0.51 A, holding power 21.5 W
Power F	Req'd for Each Valve	AC 200 V Coils: Starting amps 1.21, holding current 0.26 A, holding power 21.5 W
		*DC 24 V: Starting amps, Holding current 1.22 A, holding power 29.2 W
Ма	nifold Material	Aluminum
	Port Size	-8 SAE A & B ports -8 SAE A & B ports
# of Digit	al Pressure Switches	4
Va	alve Actuation	*Standard unit: double solenoid, 24VDC coils, closed center when de-energized. Custom options available upon request.

ClampMAX[®] CUSTOM OPTIONS

All World's ClampMAX_® system can be customized to handle your most advanced applications. Our experienced engineering staff specializes in custom creating ClampMAX_® suited to fit our customer's needs. Some of our most popular options include:

- Remote pendant controls (up to 30 feet away), single or double valve operation
- In-stack booster technology, with operational pressures ranging from 200 to 5,000 PSI
- Banner anti-tie down safety system (optional with control packages)
- HMI 7" touch screen operation of valve control option
- System control: man or robot (custom built)
- Line pressure holding or releasing options
- Complete electrical package designs
- Custom stand for small footprint





ů			Model	
6	hecilications	ACU-A-1-B-1-B1-A-1-AWM ACU-A-2-D-1-B-1-A-1-AWM	ACU-A-4-B-1-B-2-A-1-AWM ACU-A-5-D-1-B-2-A-1-AWM	ACU-C-1-B-1-B-X-A-4-AWM ACU-C-2-D-1-B-X-A-4-AWM
	Max Flow	No Load: 4GPM (15 L/min) Under Pressure: 0.5GPM (2.2 L/min)	No Load: 3.5 gal/min (14 l/min) Under Pressure: 0.33 gal/min (1.4 l/min)	15 gal/min (60 l/min)
Dumo Llait	Max Pressure	3400 PSI (0 - 23.5 MPa)	5000 PSI (0 - 35 MPa)	3000 PSI (20.6 MPa)
	Flow Adjustment Range	0 - 4 gal/min (0 - 15L/min)	0 - 3.5 gal/min (0 - 14 l/min)	2.5 - 15 gal/min (8.7 - 60 l/min)
	Operating Pressure Adjustment Range	0-3400 PSI (0 - 23.5 MPa)	0-5000 PSI (0 - 35 MPa)	225-3000 PSI (1.5 - 20.6 MPa)
	Motor	2.21	kW	5.0 kW
Power Required	Motor/Pump Unit	3 phase, AC 2	00V (50Hz), 200 V (60Hz), 220V (60Hz) (permissible voltage flu	ction +/- 10%
	AC 3 phase, 200V (50Hz)	4.7	×.	22.1 A
Pump Rated Current	AC 3 phase, 200V (60Hz)	4.5	ŞA	21.7 A
	AC 3 phase 220V (60Hz)	4.3	ŝA	20.2 A
No Fuse E	Breaker Capacity (A)	15	A	30 A
Exter	nal Input Signal	3 channe	els, photo coupler insulation, DC24V, (Max of 27VDC, 5 mA per c	hannel)
External Output	Digital Output	1 channel, photo	coupler insulation, open collector output, DC 24 V, 50mA maxim	um per channel
Signal	Contact Output	1 channel, rela	ay output, contact capacity: DC 30 V , 1A (resistance load), 1 cor	nmon contact
	Usable Oil		Mineral - oil base hydraulic oil viscosity grade ISO VG32-VG68	
Ta	ank Oil Temp	0 to 60	degrees C (recommended operating temperature range : 15 to	50 °C)
Operating A	Ambient Temperature		0 - 40 °C	
Storag	te Ambient Temp		-20 to 60 °C	
	Humidity		85% RH maximum (no condensation)	
lns	stallation Site		Indoors (secured with bolts, etc.)	
	Altitude		1000 m maximum	
Nun	nber of Valves	2 4	2 4	2 4
		AC 100 V coi	ils: Starting amps 2.4, Holding current 0.51 amps, Holding Powe	r 21.5 Watts
Power Rec	quired for Each Valve	AC 200 V Coll	s: Starting Amps 1.21, Holding Current 0.26 amps, Holding pow	er 21.5 Watts
		*DC 24 V:	Starting Amps, Holding Current 1.22 amps, Holding Power 2	9.2 Watts
Mar	nifold Material	Aluminum	Ductile Iron	Aluminum
	Port Size		-8 SAE A & B ports	
# of Digita	I Pressure Switches	2 4	2 4	2 4
Val	Ive Actuation	*Standard Unit: double solenc	oid, 24VDC Coils, closed center when de-energized. Custom of	tions available upon request

* notes standard option

ClampMAX



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