

The UNITROL SOLUTION-2[®]

combines all of the unique features of the original UNITROL SOLUTION[®] with additional functions that...

- ➔ Eliminate the need for PLC controls
- ➔ Provide 26 to 46 input/output functions
- ➔ Eliminate complex codes
- ➔ Do not require ladder logic programming
- ➔ Allow you to simply do more complex things



Available with remote console or built in cabinet. See back page for options.



UNITROL

THE UNITROL
SOLUTION
2

RWMA



SIMPLE - LOGICAL - POWERFUL



Think of the **SOLUTION-2** programming as connecting a series of **LINKS** in a **CHAIN**. Each **LINK** of the **CHAIN** contains a **PROGRAM**.

Each **PROGRAM** consists of a complete set of instructions that you enter to operate valves, check inputs, and if desired, do a complete weld sequence (SQUEEZE, WELD, HOLD, etc.) There is space for **75 complete PROGRAMS** in the **SOLUTION-2** solid state (no battery) memory.

Notice that since the same **PROGRAM** can be used in any number of **LINKS**, it is only necessary to enter the repetitive operations *one time*.

The **SOLUTION-2** then performs the selected **PROGRAMS** *one LINK at a time*. By selecting various operating modes, this sequence can be continuous, or can be interrupted at various points and continued as desired.

The **SOLUTION-2** comes with the ability to store and use up to **15 different CHAINS**. Each **CHAIN** can have up to **45 LINKS**.

Each **LINK** can select from **75 PROGRAMS** in the control's electronic memory.





The Easiest Way To Do Complex Welding Sequences

This advanced system, by **UNITROL ELECTRONICS**, allows **fast** and **easy** setting of even the most **complex** welding sequences with the minimum number of **English language** steps entered from a 17 button keypad. Absolutely **no codes** are required when programming the **SOLUTION-2**.

SOLUTION-2 comes complete with **32 digit alpha/numeric display** and a security keyboard lock.

The powerful **SOLUTION-2** can eliminate the need for a PLC on many complicated sequence welding systems!

Weld and valve sequences are programmed like **LINKS** in a **CHAIN**. Each of up to **45 LINKS** can do **any** or **all** of the following:

- ➔ Operate up to 16 solenoid valves
- ➔ Fire any of up to 15 SCR contactors
- ➔ Check condition of up to 5 pressure/limit/proximity switches
- ➔ Wait for proper Tip Force from up to 16 pressure transducers
- ➔ Monitor Weld Current
- ➔ Weld with all RWMA sequences
- ➔ Dwell between this link and the next
- ➔ Stop after link and wait for switch closure to continue the chain



Follow these steps to select a **SOLUTION-2®** that matches your welder:

1. Find the **primary voltage** of your welder in the **red** area of the chart below.
2. Move **downward** from this **primary voltage** to the **blue** box that includes the KVA as shown on the nameplate of your welder.
3. From this point, move to the **right** for the **SOLUTION-2®** Model Number in the column that lists the desired **circuit protection** and **cabinet style** (see photos at right). Note that circuit breakers are recommended for most production welding systems.
EXAMPLE: The correct **single phase SOLUTION-2®** controls **with circuit breaker** protection for a **50 KVA** spot welder working at **460 volts** are: **#9280-810, 9280L-810, or 9280D-810** (depending on desired cabinet style).
4. Order this model number from your authorized **UNITROL** representative or distributor who will recommend control options.

SINGLE SCR CONTACTOR SIZING CHART

WELDER PRIMARY VOLTAGE					MODEL NUMBERS		CABINET SIZE		
208 Volts	230 Volts	380 Volts	460 Volts	575 Volts	With Circuit Breaker	Without Protection	A	B	C
1-15 KVA	1-15 KVA	1-25 KVA	1-30 KVA	1-40 KVA	9280-990	9280-900	20	20	9
					—	9280M-900	—	—	8
					9280L-990	9280L-900	20	20	9
					9280D-990	9280D-900	20	20	9
16-30 KVA	16-35 KVA	26-50 KVA	31-65 KVA	41-80 KVA	9280-810	9280-800	20	20	9
					—	9280M-800	—	—	8
					9280L-810	9280L-800	20	20	9
					9280D-810	9280D-800	20	20	9
31-75 KVA	36-80 KVA	51-130 KVA	66-170 KVA	81-200 KVA	9280-620	9280-600	20	20	9
					—	9280M-600	—	—	14
					9280L-620	9280L-600	20	20	9
					9280D-620	9280D-600	20	20	9
76-120 KVA	81-130 KVA	131-200 KVA	171-250 KVA	201-325 KVA	9280-630	same as above	24	24	9
					9280L-630		24	24	9
					9280D-630		24	24	9
					—		—	—	—
121-200 KVA	131-250 KVA	201-450 KVA	251-500 KVA	326-600 KVA	9280-440	—	30	30	13
					9280L-440	—	30	30	13
					9280D-440	—	30	30	13
					—	9280-400	20	20	9
					—	9280L-400	20	20	9
					—	9280D-400	20	20	9

COMPLETE RETROFIT SYSTEMS WITHOUT POWER CABINETS

For use with existing SCR Contactors.....9280-SCO, 9280M-S00, 9280-S00

Multi-SCR Contactor and Option Sizing:

The enclosure size will vary depending on the installed functions.

- ➔ 1-15 SCR Contactors
- ➔ 1-15 Secondary Current Coils
- ➔ 4-16 Solenoid Valve Drivers
- ➔ 1-16 Differential Pressure Transducers
- ➔ SOFT TOUCH Safety System

Distributed By:

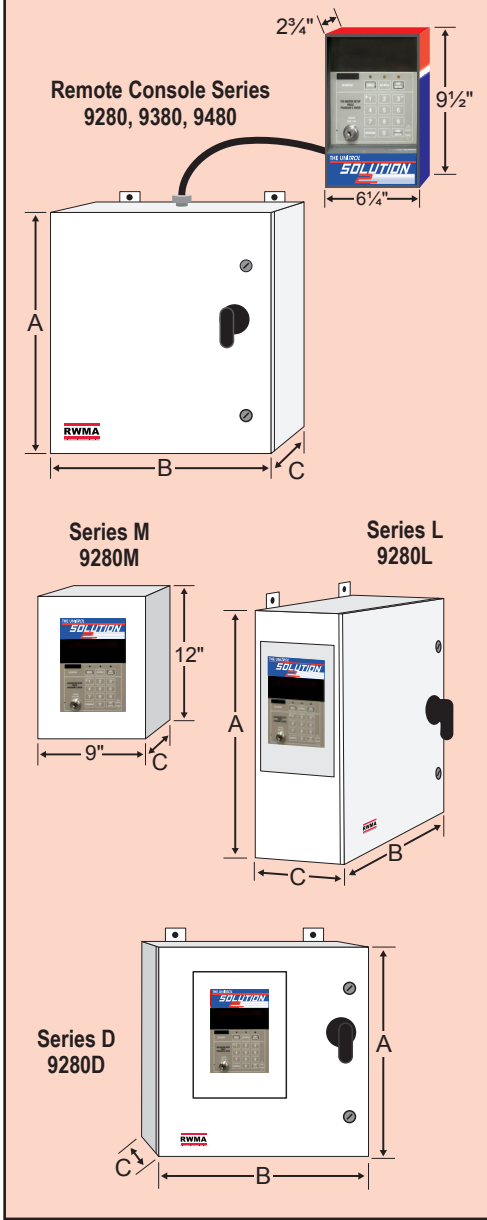
UNITROL

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CABINET STYLES



5 Year Warranty

Your investment is protected by the exclusive UNITROL 5 Year Limited Warranty. Factory labor and parts (excluding fuses) are fully covered for the first year. This warranty is extended for an additional 4 years on a Pro Rata basis (exclusive of fuses, SCR, circuit breaker and transducers).

Parts and labor are FOB our factory. Warranty included with each system gives full details of this limited warranty along with all other conditions of coverage.