

**AB** BULLETIN  
**199**

MOV 24-48V ~ -FSMA9  
MOV 50-125V ~ -FSMA10  
MOV 130-250V ~ -FSMA11

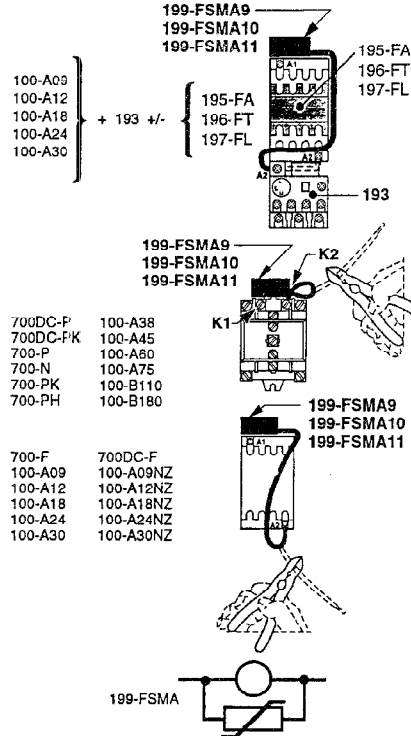


**ATTENTION:** To prevent electrical shock, disconnect from power source before installing or servicing. Install in suitable enclosure. Keep free from contaminants.  
**ATTENTION:** Préalablement à l'installation et aux opérations de service, couper l'alimentation secteur pour empêcher tous chocs électriques. Installer dans une boîte appropriée. Protéger le relais contre les contaminants.  
**ACHTUNG:** Vor Installationen oder Servicearbeiten Stromversorgung zur Vermeidung von elektrischen Unfällen trennen. Die Geräte müssen in einem passenden Gehäuse eingebaut und gegen Verschmutzung geschützt werden.  
**PRECAUCION:** Desconéctese de la corriente eléctrica, antes de la instalación o del servicio, a fin de impedir sacudidas eléctricas. Instálelo en una caja apropiada. Manténgalo libre de contaminantes.  
**CUIDADO:** Togliere tensione prima dell'installazione. Installare in custodia idonea. Tenere lontano da contaminanti.

注意：電撃を避けるため、取り付け或は修繕をする前に、電源を切断すること。適当な閉じ込めた装置の中に取り付けること。汚染物質のないようにすること。

注意：爲防止觸電，在安裝或維修之前，要切断電源。在適當的密封裝置內安裝。防止污染。

CHARACTERISTIC	MOV CATALOG NUMBER		
	FSMA9	FSMA10	FSMA11
Nominal Working Voltage Range (Volts AC 50/60-Hz or DC)	24-48	50-125	130-250
Maximum AC Working Voltage RMS Continuous (50/60 Hz)	50	140	275
Maximum DC Working Voltage DC Continuous	66	180	369
MOV Voltage @ 1.0 ma DC Test Current	74-91	158-242	389-473
Maximum Clamping Voltage at Current <i>i<sub>p</sub></i> (2/20 μs pulse)	147 ( <i>i<sub>p</sub></i> = 10 Amps)	360 ( <i>i<sub>p</sub></i> = 10 Amps)	710 ( <i>i<sub>p</sub></i> = 10 Amps)
Typical DC Leakage Current	13 μA @ 66 V	32 μA @ 180 V	66 μA @ 369 V
Typical AC Leakage Current	55 μA @ 50 V	12 μA @ 140 V	12 μA @ 275 V
Max. Transient Energy	15 Joules	12 Joules	23 Joules
Max. Power Dissipation	0.4 Watts	0.25 Watts	0.25 Watts
Operating Temperature Range	-20 to +40 °C		
Storage Temperature Range	-40 to +75 °C		



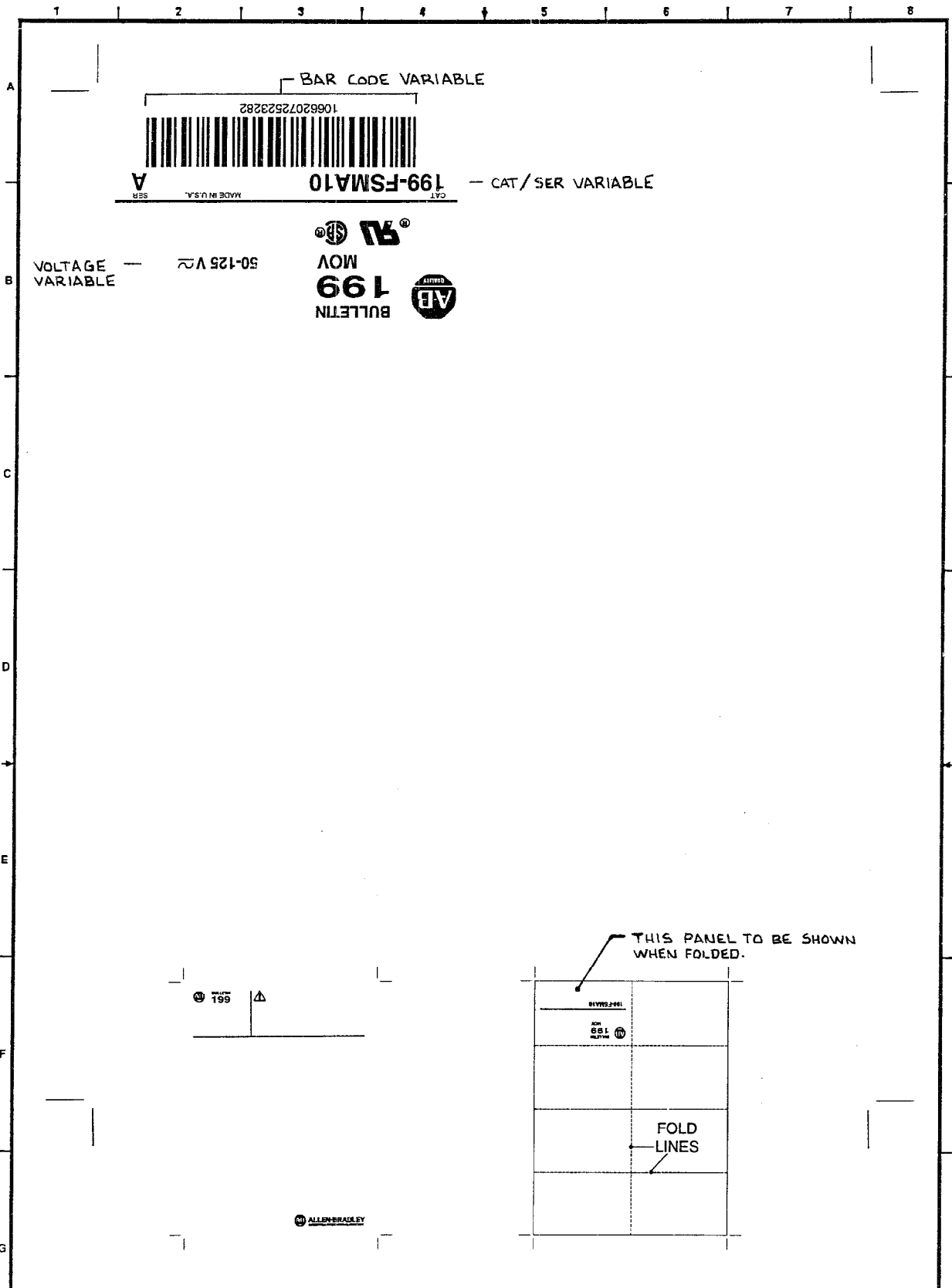
40053-368-01(B)  
Printed in U.S.A.




PART NO. VARIABLE PART NO. -01 SHOWN

PART NO	CHG LTR	MATERIAL	PART NO. VARIABLE	CAT	SER	BAR CODE NO. VARIABLE	VOLTAGE VARIABLE	FLAT SIZE	FOLDED SIZE
-06	B	2 Side printed Body Stock White Body Ink Black	40053-368-06	199-FSMA9	B	10662072523305	24-48	8-1/2" X 11"	4-1/4" X 2-3/4"
-05	B		40053-368-05	199-FSMA11	B	10662072523329	130-250		
-04	B		40053-368-04	199-FSMA10	B	10662072523312	50-125		
-03	B		40053-368-03	199-FSMA9	A	10662072523275	24-48		
-02	B		40053-368-02	199-FSMA11	A	10662072523299	130-250		
-01	B		40053-368-01	199-FSMA10	A	10662072523282	50-125		

REFERENCE	REVISION AUTHORIZATION	DIMENSIONS APPLY BEFORE SURFACE TREATMENT (DIMENSIONS IN INCHES) TOLERANCES UNLESS OTHERWISE SPECIFIED	BULLETIN 199-FSMA9, -FSMA10, -FSMA11 INSTRUCTION SHEETS	INDUSTRIAL CONTROL GROUP MAC DOCUMENT	
1	219-92-1	XX ± NA	 ALLEN-BRADLEY A ROCKWELL INTERNATIONAL COMPANY	THIS DRAWING IS THE PROPERTY OF THE ALLEN-BRADLEY CO. INC. AND MAY NOT BE COPIED, USED OR DISCLOSED FOR ANY PURPOSE EXCEPT AS AUTHORIZED IN WRITING BY THE ALLEN-BRADLEY CO. INC. LOCATION: MILWAUKEE, WISCONSIN U.S.A.	
2	1792-93	XXX ± NA			
		ANGLES: ± NA			
DR.	D. EVANS	DATE	10-22-92	DWG SIZE	SHEET 1 OF 2
CHKD.	<i>M. G. [Signature]</i>	DATE	10/22/92	B	40053-368
APPD.	<i>R. [Signature]</i>	DATE	10/22/92		



REFERENCE		BULLETIN 199-FSMA9, -FSMA10, -FSMA11 INSTRUCTION SHEETS		INDUSTRIAL CONTROL GROUP MAC DOCUMENT	
REVISION AUTHORIZATION		 <b>ALLEN-BRADLEY</b> A ROCKWELL INTERNATIONAL COMPANY		THIS DRAWING IS THE PROPERTY OF THE ALLEN-BRADLEY CO. INC. AND MAY NOT BE COPIED, USED OR DISCLOSED FOR ANY PURPOSE EXCEPT AS AUTHORIZED IN WRITING BY THE ALLEN-BRADLEY CO. INC.	
1	219-92-i			LOCATION: MILWAUKEE, WISCONSIN U.S.A.	
2	1792-93	DR. D. EVANS		DWG SIZE	SHEET 2 OF 2
		CHKD. <i>M. G. [Signature]</i>		B	40053-368
		APPD. <i>R. [Signature]</i>			
DIMENSIONS APPLY BEFORE SURFACE TREATMENT		DATE 10-22-92			
(DIMENSIONS IN INCHES) TOLERANCES UNLESS OTHERWISE SPECIFIED		DATE 10/22/92			
XX ± NA		DATE 10/22/92			
XXX ± NA					
ANGLES ± NA					