REVISIONS					
ZONE	LTR	DESCRIPTION	DATE (YR-MO-DY)	APPROVED	
	-	PRODUCT BASELINE ERR BRI-U0388	99-10-11	ED	RPJ
	A	1. REV NOTES D & E 2. ADDED SEE TABLE BRI-U4352	02-02-05	ED	

NOTES:

1. APPLICABLE STANDARDS/SPECIFICATIONS:
   A. MIL-STD-100E
   B. ANSI Y14.5M-1982

2. SPECIFICATIONS:
   A. CONTACT-
      ARRANGEMENT: 1 FORM C (SPDT)
      MATERIAL: AgNi 0.15 REF.
      RATING: 40 A RESISTIVE LOAD MAX. @ 14 VDC LOAD VOLTAGE @ 85°C
        18 A RESISTIVE LOAD MAX. @ 28 VDC LOAD VOLTAGE @ 85°C
      MAX. SWITCHING VOLTAGE: 75 VDC
      MAX. SWITCHING RATE: 6 OPERATIONS PER MINUTE
        FOR RATED LIFE AT RATED LOAD
      INITIAL VOLTAGE DROP: 0.2 V MAX. FOR NORMALLY
        OPEN (NO) CONTACTS @ 40 A CONTACT LOAD
        0.25 V MAX. FOR NORMALLY CLOSED (NC) CONTACTS
        @ 30 A CONTACT LOAD
      EXPECTED LIFE: MECHANICAL-10,000,000 OPERATIONS
        ELECTRICAL-100,000 OPERATIONS @
        RATED SWITCHING LOAD OVER TEMPERATURE RANGE OF
        -40 DEG C TO +100 DEG C, FOR NORMALLY OPEN CONTACT.
   B. COIL-
      VOLTAGE: 24 VDC NOMINAL
      RESISTANCE: 360 +/-10% OHMS
      MUST-OPERATE VOLTAGE: 14.4 VDC
      MUST-RELEASE VOLTAGE: 2.4 VDC
      PARALLEL RESISTOR: 2700 OHMS.

   C. INITIAL DIELECTRIC STRENGTH-
      BETWEEN CONTACTS AND COIL: 500 V RMS.

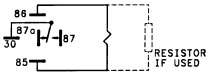
   D. OPERATING AND ENVIRONMENTAL DATA-
      INITIAL OPERATING TIME: 7 MILLISECONDS, TYPICAL
      INITIAL RELEASE TIME: 2 MILLISECONDS, TYPICAL
      TEMPERATURE RANGE-STORAGE: -40°C TO +155°C
        OPERATING: -40°C TO +125°C
      SHOCK: RELAY SHALL NOT EXHIBIT UNINTENDED CONTACT
        OPENINGS OR CLOSINGS IN EXCESS OF 1 MILLISECOND
        FOR EITHER NO OR NC CONTACTS AND SHALL SHOW NO
        EVIDENCE OF MECHANICAL OR ELECTRICAL DAMAGE WHEN
        SUBJECTED TO THE FOLLOWING HALF SINE WAVE PULSE
        SHOCKS:
        BASIC: 30 G, 11 MILLISECONDS
        GUNFIRING: 100 G, 2.5 MILLISECONDS (EXCEPT THAT
          NC CONTACT OPENINGS SHALL NOT EXCEED
          10 MILLISECONDS)
        BALLISTIC: 70 G, 0.5 MILLISECONDS

      VIBRATION: RELAY SHALL NOT EXHIBIT UNINTENDED CONTACT
        OPENINGS OR CLOSINGS IN EXCESS OF 1 MILLISECOND
        FOR EITHER NO OR NC CONTACTS AND SHALL SHOW NO
        EVIDENCE OF MECHANICAL AND ELECTRICAL DAMAGE
        WHEN SUBJECT TO THE FOLLOWING VIBRATION CONDITIONS:
        5-24 Hz, ±1.5 G
        25-50 Hz, ±0.030 INCHES DISPLACEMENT AMPLITUDE
        50-500 Hz, ±5.0 G

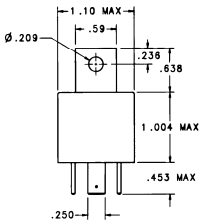
   E. MECHANICAL-
      TERMINATION: 0.250 INCHES QUICK CONNECT
        TERMINAL DESIGNATION (REFER TO WIRING DIAGRAM):
        COIL-85, 86
        COMMON, CONTACT-30
        NC CONTACT-87a
        NO CONTACT-87
        ENCLOSURES: DUST/WEATHERPROOF COVER WITH MOUNTING BRACKET
        WEIGHT: BODY STYLE A: 1.1 oz. REF, BODY STYLE B: 1.5 oz. REF.

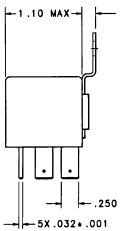
3. IDENTIFICATION OF THE SUGGESTED SOURCE(S)
   OF SUPPLY HEREON IS NOT TO BE CONSTRUED
   AS A GUARANTEE OF PRESENT OR CONTINUED
   AVAILABILITY AS A SOURCE OF SUPPLY FOR THE ITEM(S).

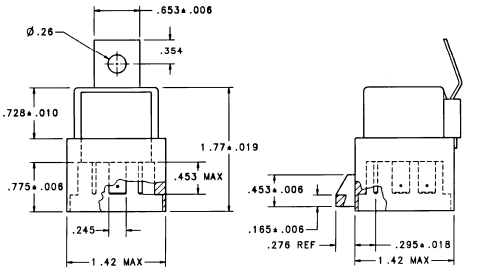
4. ITEM IDENTIFICATION: APPLY THE FOLLOWING
   MARKINGS TO CONTAINER IN ACCORDANCE
   WITH MIL-STD-130.
   19207-12389705-[ ] ← SEE TABLE
   MFR- [ ] - [ ]
   MANUFACTURER'S CAGE CODE — PART NO.

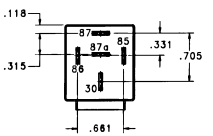


WIRING DIAGRAM

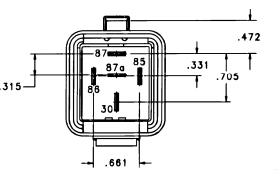








BODY STYLE A
(WITH DUST COVER)



BODY STYLE B
(WITH WEATHERPROOF COVER)

SUGGESTED SOURCE(S) OF SUPPLY						
PART NO.	VENDOR			ITEM IDENTIFICATION	BODY STYLE	RESISTOR
	ADDRESS	CAGE CODE	PART NO.			
12389705-1	SIEMENS ELECTROMECHANICAL COMPONENTS POTTER & BRUMFIELD DIV. PEACHTREE, GA 30269	77342	VF4-45H11	19207-12389705-1 MFR-77342-VF4-45H11	A	NONE
12389705-2		77342	VF4-65H11-S08	19207-12389705-2 MFR-77342-VF4-65H11-S08	B	SEE NOTE 2B

DISTRIBUTION STATEMENT A.
APPROVED FOR PUBLIC RELEASE;
DISTRIBUTION IS UNLIMITED.

VENDOR ITEM DRAWING

PMIC B		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACES ±.03 3 PLACES ±.015	CONTRACT NUMBER DAAE20-97-C-0265
			CONTRACTOR BARNES & REINECKE, INC. ARLINGTON HEIGHTS, IL 60005
	M992		DRAWN BY / DATE (YR-MO-DY) 98-05-28
12268547	M109A5		CHECKED BY / ENGINEER RRB
12268108	M109A5		DRAWING APPROVAL
57K1880	M109A5		
NEXT ASSY	USED ON	MATL ENGR R.E.WALSTROM	DESIGN APPROVAL CHRIS FUCHSER
APPLICATION			

DESIGN ACTIVITY
U.S. ARMY TANK-AUTOMOTIVE AND ARMAMENTS COMMAND
WARREN, MICHIGAN 48397-5000

RELAY

SIZE E | CAGE CODE 19207 | 12389705

SCALE NONE | UNIT WT — | SHEET —

DWG NO 12389705 | REV A