



MITE 74
Snap-Acting Control Relay
with Integral 3-Way Valve

GENERAL

1. Instrument air signal is connected to either one of the two “A” connections provided. If the other “A” connection is not used, it must be plugged to prevent loss of instrument signal pressure.
2. MITE trips when signal at “A” decreases to pre-established “trip setting”.
3. The “B” output connection is locked up when MITE is tripped. The “C” output connections are vented to atmosphere when MITE is tripped. Either “B” or “C” must be plugged, if not required, to prevent loss of instrument signal pressure. However, both may be used simultaneously.
4. To adjust “trip setting”:
 - a. Loosen locknut (2).
 - b. Turn adjustment screw (1) counterclockwise until it disengages ball (3) at top of spring assembly.
 - c. Establish trip-out pressure condition at “A”.
 - d. Press manual reset button (11) to put MITE into operation.
 - e. Turn adjusting screw slowly clockwise until trip occurs.
 - f. Retighten locknut.
5. After the instrument signal pressure has been restored to approximately 10% above the “trip setting,” the MITE can be reset by pressing the manual reset button (11).

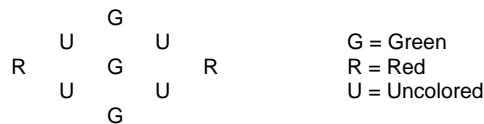
MITE 74 EXPLANATORY NOTES

The MITE 74 will not function as described in the MITE 74 bulletin and instruction sheet given certain operating conditions. These notes of explanation are intended to provide guidance in this area. Consult the factory for further information if needed.

1. The MITE 74 requires the pressure at “A” to be 5 PSIG higher than the pressure at “G”.
2. The unit will not function if the pressure at “H” is higher than the pressure at “I”.

HOW TO ALTER RANGE OF AVAILABLE TRIP SETTINGS

1. Trip settings from 1 to 100 PSIG can be obtained by changing the number of springs within the MITE top cover (6).
2. When operating within the trip range 60 to 100 PSIG, all nine springs are employed in accordance with the following layout and color coding:



3. To operate within the trip range 25 to 65 PSIG, remove all of the “green” springs.
4. To operate within the trip range 1 to 30 PSIG, remove both the “green” and the “red” springs.

REMOTE PNEUMATIC TRIP (CONNECTION “D”)

1. This connection should be left open to atmosphere when not in use.
2. Pressure applied to connection “D” will cause MITE to trip provided that pressure applied is greater than the difference between “trip setting” and the instantaneous pressure at “A”. Provision must be made to vent “D” to atmosphere after trip has occurred in order to restore MITE to normal operation.
3. MITE can be set to trip on increasing pressure at “D” provided that a constant supply pressure (greater than the “D” trip-out pressure) is furnished at “A”. This supply pressure will appear at “B” and “C” when MITE is in operation. “Trip setting” is adjusted as explained above, except that trip-out pressure conditions must be established at both “A” and “D” before step 4d.

THREE-WAY VALVE

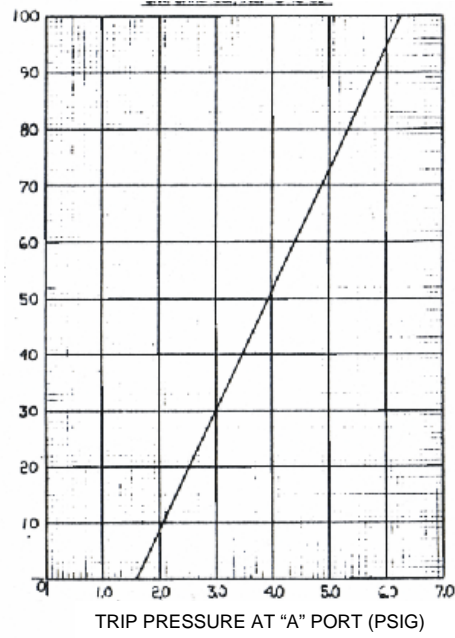
1. MITE 74 is equivalent of MITE 70 with integral three-way valve. “I” is open to “H” when MITE is in operation. “H” is open to “G” when MITE is tripped. “I” closes before “G” opens and vice versa.
2. “G”, “H” and “I” need not be plugged when not in use.
3. Two “C” connections are provided with this model. Either or both must be plugged when not in use.

LIMITED WARRANTY & DISCLAIMER

ControlAir, Inc. products are warranted to be free from defects in materials and workmanship for a period of eighteen months from the date of sale, provided said products are used according to ControlAir, Inc. recommended usages. ControlAir, Inc.'s liability is limited to the repair, purchase price refund, or replacement in kind, at ControlAir, Inc.'s sole option, of any products proved defective. ControlAir, Inc. reserves the right to discontinue manufacture of any products or change products materials, designs or specifications without notice. Note: ControlAir does not assume responsibility for the selection, use, or maintenance of any product. Responsibility for the proper selection, use, and maintenance of any ControlAir product remains solely with the purchaser and end user.

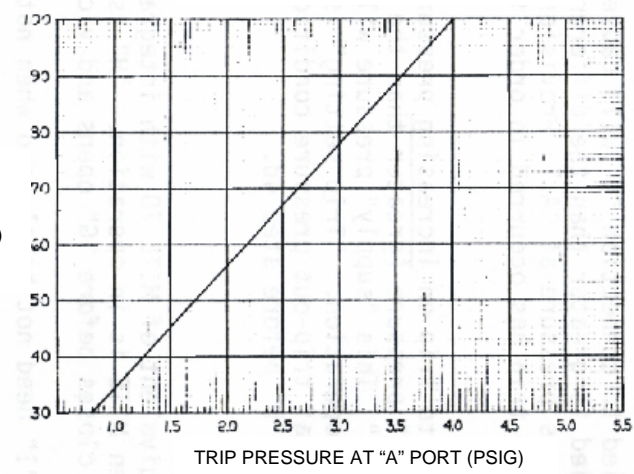
REVISIONS				
NO.	DATE	DESCRIPTION	BY	APP'D
1	10-21-89	OFF. EDITION OF 251 ODE-1		

MAXIMUM OPERATING PRESSURE FOR MITE 70 AND MITE 74



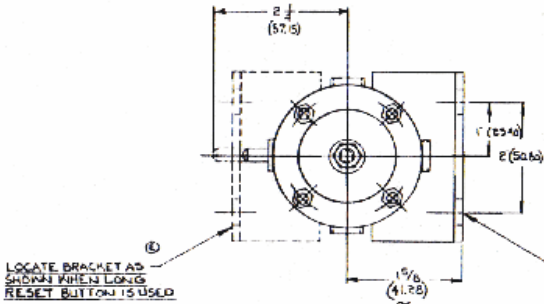
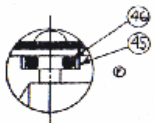
MAXIMUM OPERATING PRESSURE AT "A" PORT (PSIG)

MAXIMUM OPERATING PRESSURE FOR MITE 70 AND MITE 74 USING LOW TRIP PRESSURE OPTION

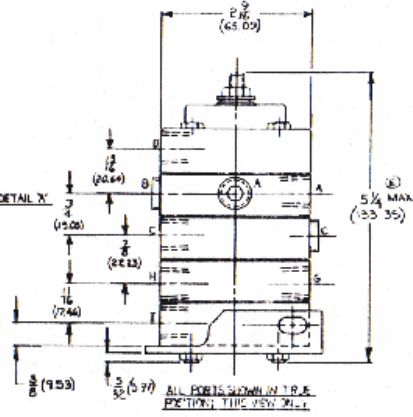
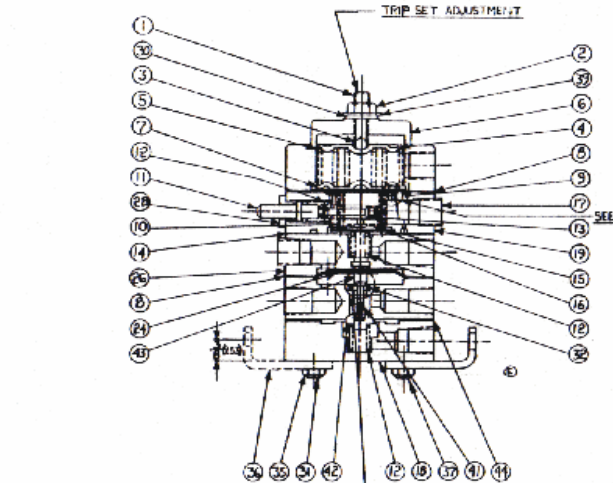
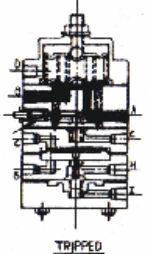


MAXIMUM OPERATING PRESSURE AT "A" PORT (PSIG)

JUL 1962



- OPERATION
- A. INSTRUMENT AIR SIGNAL - INPUT
 - B. SIGNAL OUTPUT (LOCKUP ON TRIP)
 - C. SIGNAL OUTPUT (VENT TO ATMOS. ON TRIP)
 - D. REMOTE PNEUMATIC TRIP
 - E. TRIP TO OPEN
 - H. COMMON
 - I. TRIP TO CLOSE



ALTERNATE DISTANCE PIECE FOR TWO WAY VALVE

REV.	DATE	DESCRIPTION	APPROVED
D	11-6-61	NEW DRAWING REDRAWN; SUPERSEDES NEW. DATED 10-19-57 (SIZE C) WITH REDESIGNED MOUNTING BRACKET	C.P.
E	7-20-62	REVISED MOUNTING BRACKET STANDARD ITEM #1074. PAPER #101. RELETED NOTE 2. TWO OF ITEM 31 SUPPLIED WITH MOUNTING BRACKET. ADVISE LOCATE BRACKET AS SHOWN WHEN LOCKS RESET BUTTON IS USED. USE D. REL. 5/8 MAX. 5/8 DIA. HO. RECENT D. REL. #1	J.C.
F	10-21-67	ADD: ITEM #1015 IS TO PARTS LIST. DETAIL #1, TYPE 2, POWER KES. DIM. SHEET #2. REVISED WAS SHEET OF 1. ECP NO. 11. 49100. 1	J.M.

- NOTES:
- 1) PRESSURE RATING: 100 PSIG MAXIMUM (703 KG/CM² MAXIMUM)
 - 2) TEMPERATURE RATING: -40°F to +150°F (-40°C to +65°C)
 - 3) PORT SIZES: 1/4 NPT (6.35) WITH 2B (2.15) INTERNAL PORTS
 - 4) FOR SALES DRAWING: REFER TO DIM. SHEET 39-00
 - 5) FOR LOW TRIP PRESSURE OPTION ONLY: USE SIZE 2 OF ITEM 13, AND ADD ITEMS 45 & 46 AT A' & B' PORTS.

QTY.	ITEM #	DESCRIPTION	MATERIAL
1	46	O-RING	BUNA-N
1	45	SPACER RING	AA BLACK
1	44	GASKET	NEDERINE
1	43	DISTANCE PIECE	303 STAINLESS STEEL
1	42	PLUG	PLSC
1	41	SPRING	ENI CARBONITE STEEL
1	39	RUBBER	STAINLESS STEEL
2	37	STUD	STAINLESS STEEL
1	36	BRACKET	ANODIZED ALUMINUM
1	35	HEX NUT	STAINLESS STEEL
1	32	O-RING	BRUN-N
1	31	STUD	STAINLESS STEEL
1	30	THEORETICAL	MISC.
1	29	WELL BOTTOM RETAINER	BRASS
2	16	COPT. RING	ANODIZED ALUMINUM
1	24	LOWER DAMPERSH DISC	ALUMINUM
1	15	ROUTING RING	ANODIZED ALUMINUM
1	18	BOTTOM COVER	ANODIZED ALUMINUM
1	17	SOCKET HEAD PIPE PLUG	BRASS
1	16	O-RING	BRUN-N
1	15	LOWER DAMPERSH DISC	ALUMINUM
1	14	GASKET	NEDERINE
4	13	O-RING	BRUN-N
1	12	SPRING	ENI CARBONITE STEEL
1	11	RESET BUTTON	BRASS
1	10	RUBBER	303 STAINLESS STEEL
1	9	UPPER DAMPERSH DISC	ALUMINUM
1	8	UPPER DAMPERSH	STEEL BRIFERED NEDERINE
1	7	LOWER SPRING RETAINER	CAD. STEEL
1	6	TOP COVER	ANODIZED ALUMINUM
4	5	SPRING	ENI CARBONITE STEEL
1	4	UPPER SPRING RETAINER	CAD. STEEL
1	3	BALL	STEEL
1	2	LOCKWASH	STAINLESS STEEL
1	1	ADJUSTING SCREW	STAINLESS STEEL

* RECOMMENDED SPARE PARTS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES (M.M) AND ARE FOR REFERENCE ONLY. FRACTIONS - 1/8 ANGLE IN 1/4 TWO PLACE DECIMALS = 1/6 THREE PLACE DECIMALS = 1/32 FINISHED SURFACES BY RAU BREAK SHARP CORNERS BY MAX. DO NOT SCALE THIS DRAWING.

MATERIAL: SEE PARTS LIST

CONTRACT NO. _____

DAHL CO. INC. 12001 BAY AVENUE, ST. LOUIS, MO. 63141

DAHL CONTROL VALVE DIVISION

DR. JRM	ENG. W.C.	<p>APPROVED</p> <p>APPROVED</p>
CHK. W.C.	APPV. B.A.	

MITE 74 SNAP ACTING CONTROL RELAY WITH INTEGRAL 3-WAY VALVE

SIZE: CODE IDENT NO: DRAWING NO. **D 88773** 3004-02-0000-500

SCALE: FILL IN HERE: 1" = 1" SHEET 1 OF 1