



NOTES:

- CONNECTED TO THE CABINET. CUSTOMER TO CONNECT THE CABINET GROUND LUGS TO EARTH GROUND AND UTILITY GROUND.
- THE CUSTOMER MUST USE TYPE 3R HUBS AND FITTINGS (OR EQUIVALENT) TO MAINTAIN THE ENCLOSURE RATING.
- THE MOTOR OVERLOAD RELAY IS FACTORY SET FOR MANUAL RESET. CUSTOMER TO ADJUST THE MOTOR OVERLOAD RELAY TRIP SETTING FOR THE ACTUAL AC MOTOR'S FULL LOAD AMPS.
- TERMINALS TB1(1) AND TB1(2) ARE SUPPLIED FOR INSERTION OF CUSTOMER SUPPLIED NORMALLY CLOSED SAFETY CONTACTS (I.E., FIRESTAT, FREEZE/STAT, WINDING OR BEARING TEMPERATURE ACTIVATED SWITCHES). IF APPLICABLE, REMOVE FACTORY INSTALLED JUMPER J1.
- TERMINALS TB1(5) AND TB1(6) ARE SUPPLIED FOR INSERTION OF A CUSTOMER SUPPLIED NORMALLY OPEN DAMPER END SWITCH (OPEN = DAMPER CLOSED, AND CLOSED = DAMPER FULLY OPEN), OR A NORMALLY OPEN BUILDING AUTOMATION SYSTEM (BAS) INTERLOCK. IF APPLICABLE, REMOVE THE FACTORY INSTALLED JUMPER J2.
- INSULATED TWISTED SHIELDED WIRE IS REQUIRED. 2 CONDUCTOR #18GA. (BELDEN #8760 OR EQUIVALENT). SHIELD TO CONNECT TO PROPER TERMINAL AS SHOWN. CONNECT THE SHIELD ONLY AT THIS END. STUB AND ISOLATE THE OTHER END. DO NOT RUN THESE WIRES IN THE SAME CONDUIT AS THE AC POWER AND AC CONTROL WIRES.
- CUSTOMER TO ADJUST THE THERMOSTAT ON THE SPACE HEATER HR1 FOR THE MINIMUM DESIRED TEMPERATURE INSIDE THE DRIVE CABINET. THIS SET TEMPERATURE IS NORMALLY SELECTED TO BE SLIGHTLY HIGHER THAN THE MINIMUM AMBIENT TEMPERATURE OF THE AIR SURROUNDING THE DRIVE CABINET, AND IS THE TEMPERATURE AT WHICH THE SPACE HEATER HR1 WILL SHUT OFF.
- SERIAL COMMUNICATIONS OPTIONS T2, T3, T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, T14, T15, T16, T17, T18, T19, T20, T21, T22, T23, T24, T25, T26, T27, T28, T29, T30, T31, T32, T33, T34, T35, T36, T37, T38, T39, T40, T41, T42, T43, T44, T45, T46, T47, T48, T49, T50, T51, T52, T53, T54, T55, T56, T57, T58, T59, T60, T61, T62, T63, T64, T65, T66, T67, T68, T69, T70, T71, T72, T73, T74, T75, T76, T77, T78, T79, T80, T81, T82, T83, T84, T85, T86, T87, T88, T89, T90, T91, T92, T93, T94, T95, T96, T97, T98, T99, T100, T101, T102, T103, T104, T105, T106, T107, T108, T109, T110, T111, T112, T113, T114, T115, T116, T117, T118, T119, T120, T121, T122, T123, T124, T125, T126, T127, T128, T129, T130, T131, T132, T133, T134, T135, T136, T137, T138, T139, T140, T141, T142, T143, T144, T145, T146, T147, T148, T149, T150, T151, T152, T153, T154, T155, T156, T157, T158, T159, T160, T161, T162, T163, T164, T165, T166, T167, T168, T169, T170, T171, T172, T173, T174, T175, T176, T177, T178, T179, T180, T181, T182, T183, T184, T185, T186, T187, T188, T189, T190, T191, T192, T193, T194, T195, T196, T197, T198, T199, T200, T201, T202, T203, T204, T205, T206, T207, T208, T209, T210, T211, T212, T213, T214, T215, T216, T217, T218, T219, T220, T221, T222, T223, T224, T225, T226, T227, T228, T229, T230, T231, T232, T233, T234, T235, T236, T237, T238, T239, T240, T241, T242, T243, T244, T245, T246, T247, T248, T249, T250, T251, T252, T253, T254, T255, T256, T257, T258, T259, T260, T261, T262, T263, T264, T265, T266, T267, T268, T269, T270, T271, T272, T273, T274, T275, T276, T277, T278, T279, T280, T281, T282, T283, T284, T285, T286, T287, T288, T289, T290, T291, T292, T293, T294, T295, T296, T297, T298, T299, T300, T301, T302, T303, T304, T305, T306, T307, T308, T309, T310, T311, T312, T313, T314, T315, T316, T317, T318, T319, T320, T321, T322, T323, T324, T325, T326, T327, T328, T329, T330, T331, T332, T333, T334, T335, T336, T337, T338, T339, T340, T341, T342, T343, T344, T345, T346, T347, T348, T349, T350, T351, T352, T353, T354, T355, T356, T357, T358, T359, T360, T361, T362, T363, T364, T365, T366, T367, T368, T369, T370, T371, T372, T373, T374, T375, T376, T377, T378, T379, T380, T381, T382, T383, T384, T385, T386, T387, T388, T389, T390, T391, T392, T393, T394, T395, T396, T397, T398, T399, T400, T401, T402, T403, T404, T405, T406, T407, T408, T409, T410, T411, T412, T413, T414, T415, T416, T417, T418, T419, T420, T421, T422, T423, T424, T425, T426, T427, T428, T429, T430, T431, T432, T433, T434, T435, T436, T437, T438, T439, T440, T441, T442, T443, T444, T445, T446, T447, T448, T449, T450, T451, T452, T453, T454, T455, T456, T457, T458, T459, T460, T461, T462, T463, T464, T465, T466, T467, T468, T469, T470, T471, T472, T473, T474, T475, T476, T477, T478, T479, T480, T481, T482, T483, T484, T485, T486, T487, T488, T489, T490, T491, T492, T493, T494, T495, T496, T497, T498, T499, T500, T501, T502, T503, T504, T505, T506, T507, T508, T509, T510, T511, T512, T513, T514, T515, T516, T517, T518, T519, T520, T521, T522, T523, T524, T525, T526, T527, T528, T529, T530, T531, T532, T533, T534, T535, T536, T537, T538, T539, T540, T541, T542, T543, T544, T545, T546, T547, T548, T549, T550, T551, T552, T553, T554, T555, T556, T557, T558, T559, T560, T561, T562, T563, T564, T565, T566, T567, T568, T569, T570, T571, T572, T573, T574, T575, T576, T577, T578, T579, T580, T581, T582, T583, T584, T585, T586, T587, T588, T589, T590, T591, T592, T593, T594, T595, T596, T597, T598, T599, T600, T601, T602, T603, T604, T605, T606, T607, T608, T609, T610, T611, T612, T613, T614, T615, T616, T617, T618, T619, T620, T621, T622, T623, T624, T625, T626, T627, T628, T629, T630, T631, T632, T633, T634, T635, T636, T637, T638, T639, T640, T641, T642, T643, T644, T645, T646, T647, T648, T649, T650, T651, T652, T653, T654, T655, T656, T657, T658, T659, T660, T661, T662, T663, T664, T665, T666, T667, T668, T669, T670, T671, T672, T673, T674, T675, T676, T677, T678, T679, T680, T681, T682, T683, T684, T685, T686, T687, T688, T689, T690, T691, T692, T693, T694, T695, T696, T697, T698, T699, T700, T701, T702, T703, T704, T705, T706, T707, T708, T709, T710, T711, T712, T713, T714, T715, T716, T717, T718, T719, T720, T721, T722, T723, T724, T725, T726, T727, T728, T729, T730, T731, T732, T733, T734, T735, T736, T737, T738, T739, T740, T741, T742, T743, T744, T745, T746, T747, T748, T749, T750, T751, T752, T753, T754, T755, T756, T757, T758, T759, T760, T761, T762, T763, T764, T765, T766, T767, T768, T769, T770, T771, T772, T773, T774, T775, T776, T777, T778, T779, T780, T781, T782, T783, T784, T785, T786, T787, T788, T789, T790, T791, T792, T793, T794, T795, T796, T797, T798, T799, T800, T801, T802, T803, T804, T805, T806, T807, T808, T809, T810, T811, T812, T813, T814, T815, T816, T817, T818, T819, T820, T821, T822, T823, T824, T825, T826, T827, T828, T829, T830, T831, T832, T833, T834, T835, T836, T837, T838, T839, T840, T841, T842, T843, T844, 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TABLE 1 FACTORY SET DRIVE PARAMETERS

| PARAMETER | DATA        | UNIT  | DESCRIPTION/REMARKS  |
|-----------|-------------|-------|--|
| b1-01     | SEE TABLE 5 | N/A   | FREQUENCY REFERENCE SELECTION  |
| b1-08     | 1           | N/A   | RUN COMMAND SELECTION DURING PROGRAMMING - ENABLED                               |
| b2-03     | 0.0         | SEC.  | DC INJECTION BRAKING TIME AT START   |
| b5-01     | SEE TABLE 5 | N/A   | PI MODE SETTING  |
| d1-01     | 10.0        | HZ.   | FREQUENCY REFERENCE 1 - SEE TABLE 5  |
| d1-02     | 6.0         | HZ.   | FREQUENCY REFERENCE 2 - SEE TABLE 5  |
| E1-01     | 240(480)    | VOLTS | STANDARD INPUT VOLTAGE SETTING   |
|           | 208         | VOLTS | INPUT VOLTAGE SETTING FOR BASE NUMBER "D_----"                                   |
| E1-05     | 230(460)    | VOLTS | STANDARD MAXIMUM OUTPUT VOLTAGE SETTING  |
|           | 208         | VOLTS | MAXIMUM OUTPUT VOLTAGE SETTING FOR BASE NUMBER "D_----"                          |
| H1-01     | 70          | N/A   | TERMINAL S3 SET FOR BYPASS DRIVE ENABLE  |
| H1-02     | SEE TABLE 5 | N/A   | TERMINAL S4 SELECTION  |
| H1-03     | SEE TABLE 5 | N/A   | TERMINAL S5 SELECTION  |
| H1-04     | SEE TABLE 5 | N/A   | TERMINAL S6 SELECTION  |
| H2-02     | 3B          | N/A   | TERMINALS M3-M4 SET FOR SERIAL COMM. RUN COMMAND                                 |
| H3-08     | SEE TABLE 5 | N/A   | TERMINAL A2 SIGNAL SELECTION   |
| H3-09     | SEE TABLE 5 | N/A   | TERMINAL A2 FUNCTION SELECTION   |
| H5-02     | SEE TABLE 5 | N/A   | SERIAL COMMUNICATIONS SPEED SELECTION BAUD RATE                                  |
| H5-07     | SEE TABLE 5 | N/A   | REQUEST TO SEND (RTS) CONTROL SELECTION  |
| H5-08     | SEE TABLE 5 | N/A   | SERIAL COMMUNICATIONS PROTOCOL SELECTION   |
| H5-09     | 10.0        | SEC.  | SERIAL COMMUNICATIONS ERROR DETECTION TIME                                       |
| L4-05     | 0           | N/A   | FREQUENCY REFERENCE LOSS DETECTION DISABLED                                      |
| L5-01     | 10          | N/A   | NUMBER OF AUTO RESTART ATTEMPTS  |
| L5-03     | 10.0        | SEC.  | MAXIMUM RESTART TIME AFTER FAULT   |
| o2-02     | 0           | N/A   | DIGITAL OPERATOR KEYPAD "OFF" KEY DISABLED                                       |
| o2-03     | 1           | N/A   | USER INITIALIZATION FACTORY SET PARAMETER DEFAULT VALUES (FOUND IN A1-03="1110") |
| o2-15     | 0           | N/A   | DIGITAL OPERATOR KEYPAD "HAND" KEY DISABLED                                      |
| o3-02     | 1           | N/A   | DIGITAL OPERATOR KEYPAD READ ALLOWED ENABLED                                     |

SEE SHEET 3 FOR TABLE 5.

CUSTOMER WIRING REQUIREMENTS

- FOR 0 TO 100 AMPS, USE A MINIMUM OF 60° -75°C COPPER WIRE.
- FOR ABOVE 100 AMPS, USE A MINIMUM OF 75°C COPPER WIRE.

| TABLE 2                                  |      |                         |                       | TABLE 3                        |                             |                               |                             |
|--|------|-------------------------|-----------------------|--------------------------------|-----------------------------|-------------------------------|-----------------------------|
| P7 BYPASS MODEL NO. BASE NUMBER P7BRXXXX |      | MOTOR CIRCUIT PROTECTOR |                       | P7 BYPASS PART NUMBER P7BRXXXX |                             | EARTH & UTILITY GROUND WIRING |                             |
| 208V                                     | 480V | MFG. NUMBER             | CURRENT RATING (AMPS) | WIRE SIZE RANGE (AWG)          | TIGHTENING TORQUE (LB.-IN.) | WIRE SIZE RANGE (AWG)         | TIGHTENING TORQUE (LB.-IN.) |
| D343                                     | A312 | B361                    | 600                   | (1-3) x (3/0-500 kcmil)        | (1-3) x 300                 | 208V 240V 480V                | 275                         |
| D396                                     | A360 | B414                    | 800                   |                                |                             | D343 A312 B361                |                             |
|  |      | B477                    |                       |                                |                             | D396 A360 B414                |                             |
|  |      |                         |                       |                                |                             |                               |                             |

| TABLE 4                                  |      |                   |                             |
|--|------|-------------------|-----------------------------|
| P7 BYPASS MODEL NO. BASE NUMBER P7BRXXXX |      | A.C. MOTOR WIRING |                             |
| 208V                                     | 480V | MFG. NUMBER       | MOTOR OVERLOAD RELAY        |
| D343                                     | A312 | B361              | WIRE SIZE RANGE (AWG)       |
| D396                                     | A360 | B414              | TIGHTENING TORQUE (LB.-IN.) |
|  |      | B477              |                             |
|  |      |                   | LR9 F7379 2 x (2-600 kcmil) |
|  |      |                   | 2 x 500                     |
|  |      |                   | 22 - 14                     |
|  |      |                   | 4.4                         |




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|                                |               |                          |
|--------------------------------|---------------|--------------------------|
| DRAWN BY: D.R. CMELAK          | DATE: 5/1/07  | TITLE: SCHEMATIC DIAGRAM |
| CHECKED: K. FLIERL             | DATE: 5/1/07  | P7B BYPASS               |
| TECH: J. ZUEHLKE               | DATE: 5/1/07  |                          |
| APPROVED: D.R. CMELAK          | DATE: 5/1/07  |                          |
| ORIGINAL DESIGNER: D.R. CMELAK | DATE: 5/1/07  |                          |
| SIZE: D                        | REVISION: ROO | PAGE: 2 of 3             |
| DRAWING #: DS.P7B.04           |               |                          |

| OPTION PRESENT            | DRIVE OPERATION MODE SELECTION          |            |            |            |       |       |       |       |       |                          | DRIVE CONTROL BOARD SWITCH S1 SETTING | DRIVE MODE SPEED COMMAND |                    |              |                    | DRIVE MODE PI CONTROL |                    |              |                          | RUN/STOP CONTROL (SEE SHEET 2, NOTE 5) |        |
|---------------------------|---|------------|------------|------------|-------|-------|-------|-------|-------|--------------------------|---------------------------------------|--------------------------|--------------------|--------------|--------------------|-----------------------|--------------------|--------------|--------------------------|--|--------|
|                           | FACTORY SET P7B BYPASS DRIVE PARAMETERS |            |            |            |       |       |       |       |       |                          |                                       | HAND MODE                |                    | AUTO MODE    |                    | HAND MODE             |                    | AUTO MODE    |                          | DRIVE                                  | BYPASS |
|                           | b1-01                                   | H1-02 (S4) | H1-03 (S5) | H1-04 (S6) | H3-08 | H3-09 | H5-02 | H5-07 | H5-08 | DRIVE TERMINAL A2 SIGNAL |                                       | DRIVE TERMINAL A2 SIGNAL | DRIVE KEYPAD d1-01 | KEYPAD d1-01 | DRIVE KEYPAD d1-01 | SERIAL COMM.          | DRIVE KEYPAD d1-01 | SERIAL COMM. | DRIVE TERMINAL A2 SIGNAL |  |        |
| NONE +                    | 1                                       | 0          | 14         | 3          | 4     | 4     | 2     | 0     | 3     | 1                        | 0                                     | OFF                      | ON                 | +            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| NONE                      | 1                                       | 0          | 14         | 3          | 4     | 4     | 0     | 0     | 3     | 1                        | 0                                     | OFF                      | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TP                        | 1                                       | 0          | 14         | 3          | 4     | 4     | 2     | 0     | 3     | 1                        | 0                                     | OFF                      | ON                 | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| T2, TG, TH OR TQ +        | 0                                       | 0          | 14         | 2          | 4     | 4     | 2     | 2     | 3     | 1                        | 0                                     | OFF                      | ON                 | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| T2, TG, TH OR TQ          | 0                                       | 0          | 3          | 2          | 4     | 4     | 0     | 2     | 3     | 1                        | 0                                     | OFF                      | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| (T2, TG, TH OR TQ) AND TP | 0                                       | 0          | 3          | 2          | 4     | 4     | 2     | 2     | 3     | 1                        | 0                                     | OFF                      | ON                 | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TJ +                      | 0                                       | 0          | 14         | 6C         | 4     | 4     | 2     | 2     | 3     | 1                        | 1                                     | OFF                      | ON                 | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TJ                        | 0                                       | 0          | 3          | 6C         | 4     | 4     | 0     | 2     | 3     | 1                        | 1                                     | OFF                      | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TJ AND TP                 | 0                                       | 0          | 3          | 6C         | 4     | 4     | 2     | 2     | 3     | 1                        | 1                                     | OFF                      | ON                 | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TU +                      | 0                                       | 0          | 14         | 6C         | 4     | 4     | 2     | 2     | 3     | 1                        | 2                                     | OFF                      | ON                 | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TU                        | 0                                       | 0          | 3          | 6C         | 4     | 4     | 2     | 2     | 3     | 1                        | 2                                     | OFF                      | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TU AND TP                 | 0                                       | 0          | 3          | 6C         | 4     | 4     | 2     | 2     | 3     | 1                        | 2                                     | OFF                      | ON                 | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TV +                      | 0                                       | 0          | 14         | 6C         | 4     | 4     | 2     | 2     | 3     | 1                        | 0                                     | OFF                      | ON                 | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TV                        | 0                                       | 0          | 3          | 6C         | 4     | 4     | 0     | 2     | 3     | 1                        | 0                                     | OFF                      | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TV AND TP                 | 0                                       | 0          | 3          | 6C         | 4     | 4     | 2     | 2     | 3     | 1                        | 0                                     | OFF                      | ON                 | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TL +                      | 0                                       | 0          | 14         | 6C         | 4     | 4     | 2     | 2     | 3     | 0                        | 0                                     | ON                       | ON                 | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TL                        | 0                                       | 0          | 3          | 6C         | 4     | 4     | 0     | 2     | 3     | 0                        | 0                                     | ON                       | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TL AND TP                 | 0                                       | 0          | 3          | 6C         | 4     | 4     | 2     | 2     | 3     | 0                        | 0                                     | ON                       | ON                 | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| PI CONTROL                | 0                                       | 1          | 14         | 19         | 4     | 4     | 2     | 2     | B     | 3                        | 1                                     | OFF                      | ON                 | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| PI CONTROL                | 0                                       | 1          | 14         | 19         | 4     | 4     | 0     | B     | 3     | 1                        | 0                                     | OFF                      | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| (T2, TG, TH OR TQ) AND PI | 3                                       | 1          | 14         | 19         | 6E    | 0     | B     | 3     | 1     | 0                        | 0                                     | OFF                      | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TJ AND PI                 | 2                                       | 1          | 14         | 19         | 6E    | 0     | B     | 3     | 1     | 1                        | 1                                     | OFF                      | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TU AND PI                 | 2                                       | 1          | 14         | 19         | 6E    | 0     | B     | 2     | 1     | 2                        | 2                                     | OFF                      | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TV AND PI                 | 2                                       | 1          | 14         | 19         | 6E    | 0     | B     | 3     | 1     | 0                        | 0                                     | OFF                      | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TL AND PI                 | 2                                       | 1          | 14         | 19         | 6E    | 0     | B     | 3     | 0     | 0                        | 0                                     | ON                       | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| (T2, TG, TH OR TQ) AND PI | 0                                       | 1          | 14         | 19         | 2     | 0     | B     | 3     | 1     | 0                        | 0                                     | OFF                      | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TJ AND PI                 | 0                                       | 1          | 14         | 19         | 6C    | 0     | B     | 3     | 1     | 1                        | 1                                     | OFF                      | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TU AND PI                 | 0                                       | 1          | 14         | 19         | 6C    | 0     | B     | 2     | 1     | 2                        | 2                                     | OFF                      | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TV AND PI                 | 0                                       | 1          | 14         | 19         | 6C    | 0     | B     | 3     | 1     | 0                        | 0                                     | OFF                      | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |
| TL AND PI                 | 0                                       | 1          | 14         | 19         | 6C    | 19    | 0     | B     | 3     | 0                        | 0                                     | ON                       | OFF                | -            | YES                | YES                   | 0-10 VDC           | 0-10 VDC     | AUTO MODE                | BYPASS                                 |        |

+ = STANDARD P7B BYPASS SET UP  
 ■ = FACTORY 2-WIRE INITIALIZATION/DEFAULT SETTING

SEE SHEET 2 FOR NOTES, AND TABLES 1, 2, 3 AND 4.



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| DATE | 5/1/07 |
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|--------------------|-------------|
| DRW BY:            | D.R. CMELAK |
| CHECKED:           | K. FLIERL   |
| TECH:              |             |
| APPROVED:          | J. ZUEHLKE  |
| ORIGINAL DESIGNER: | D.R. CMELAK |

|          |                   |
|----------|-------------------|
| TITLE    | SCHEMATIC DIAGRAM |
|          | P7B BYPASS        |
| SIZE     | D                 |
| REVISION | ROO               |
| PAGE     | 3 of 3            |