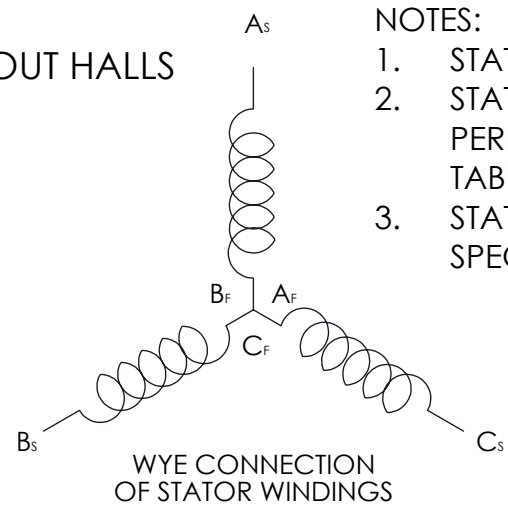


THIS SHEET APPLIES TO MODELS WITHOUT HALLS

LEAD COLOR CODE

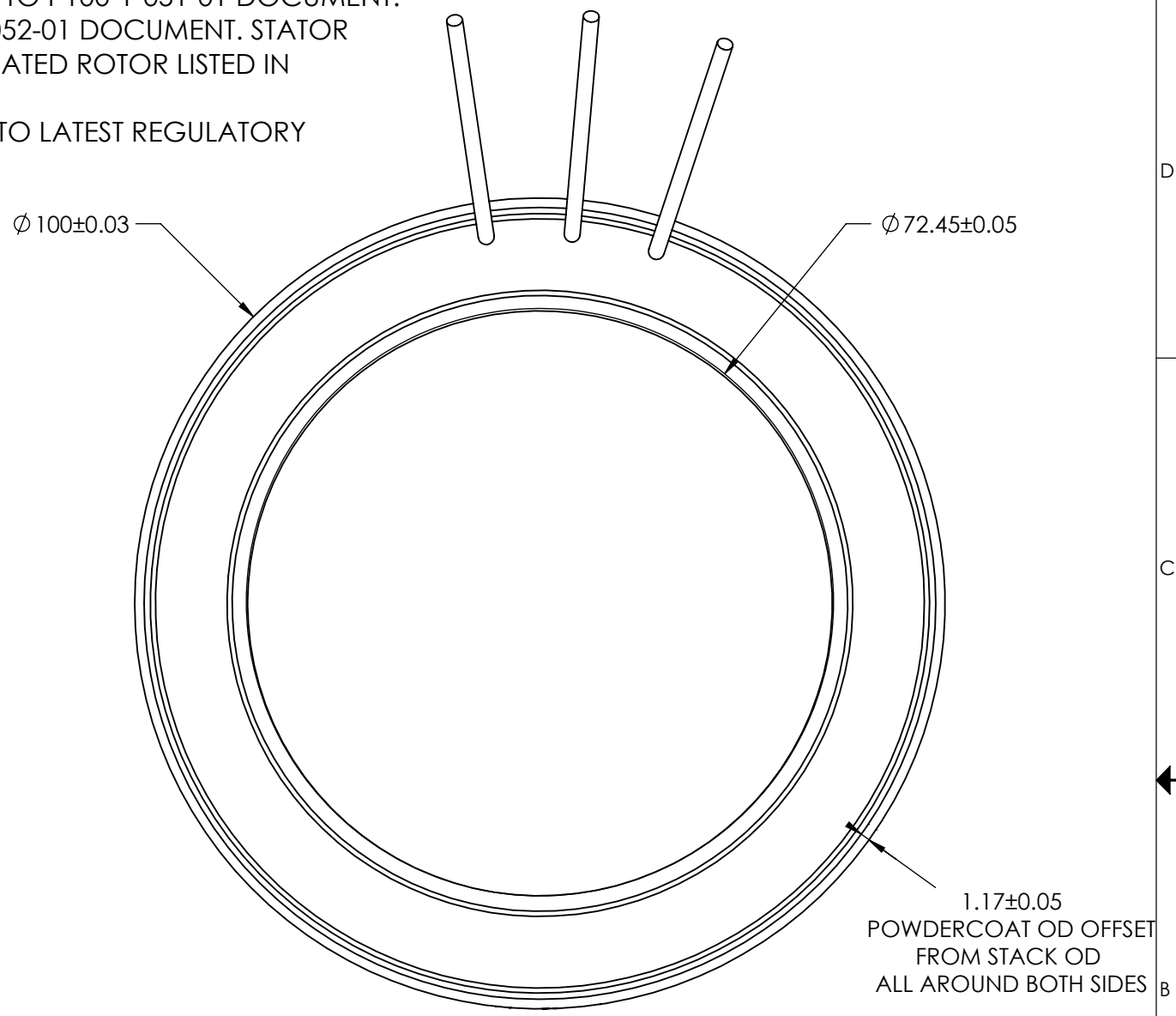
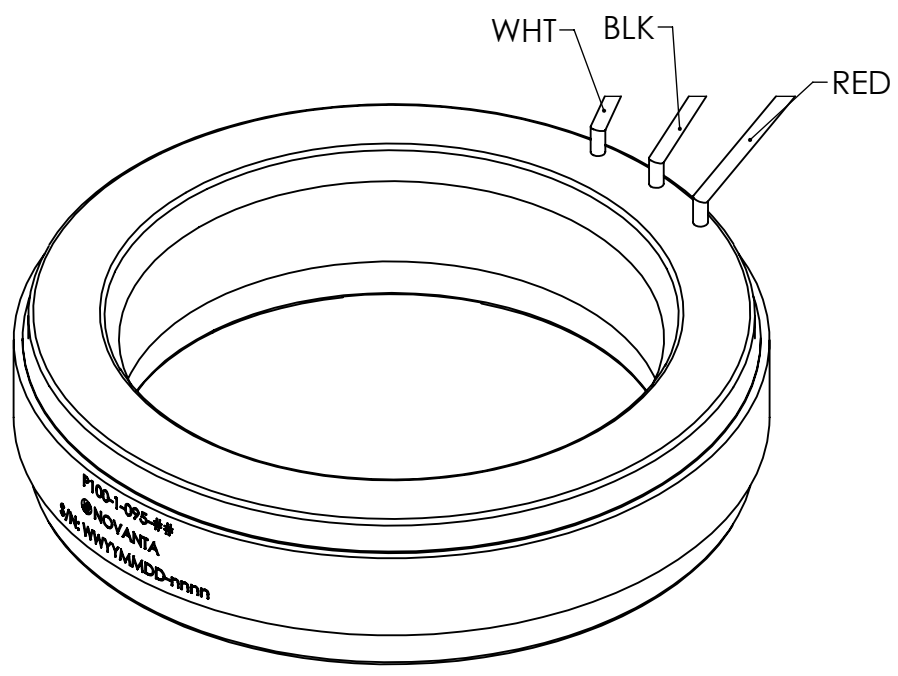
POWER LEADS

16 AWG, M22759/11 TEFLON COATED  
762mm MIN LENGTH, FLYING LEADS  
BLK - PHASE A  
RED - PHASE B  
WHT - PHASE C

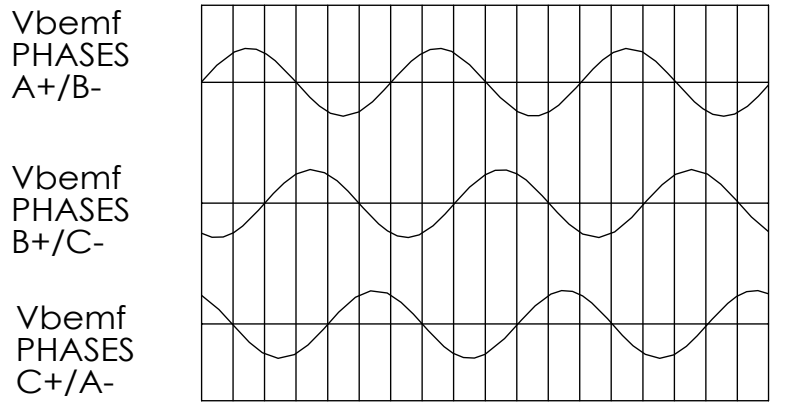


NOTES:

1. STATOR MOUNTING REQUIREMENTS, REFER TO P100-1-051-01 DOCUMENT.
2. STATOR PERFORMANCE REFER TO P100-1-052-01 DOCUMENT. STATOR PERFORMANCE IS ACHIEVED WITH ASSOCIATED ROTOR LISTED IN TABULATION TABLE ON SHEET 3.
3. STATOR IS REACH AND ROHS COMPLIANT TO LATEST REGULATORY SPECIFICATIONS.

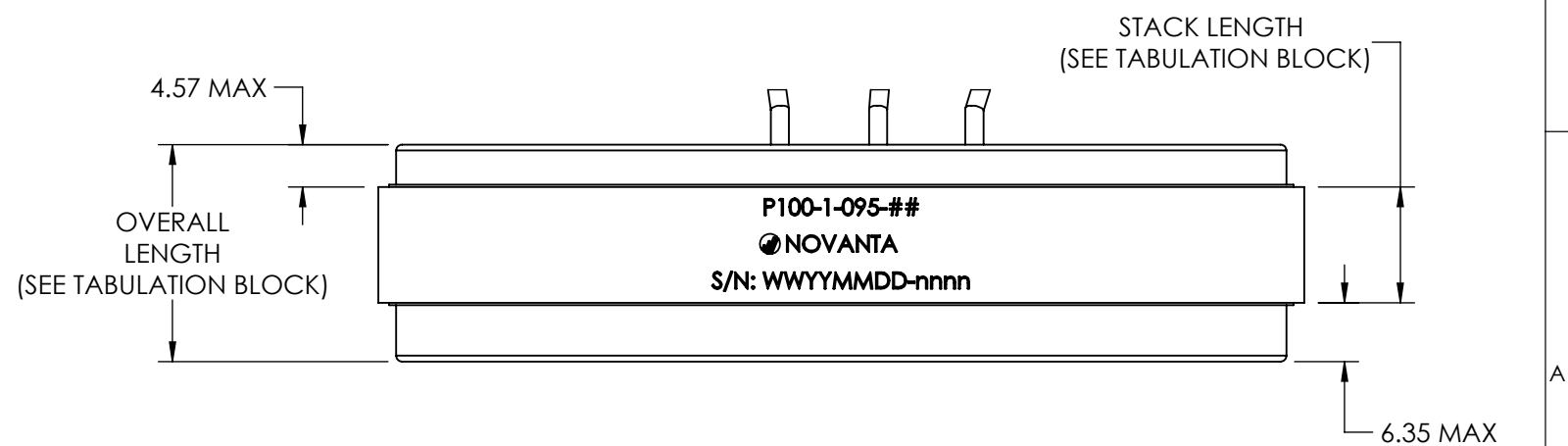


PHASE RELATION OF BACK EMF PHASE-TO-PHASE VOLTAGES DURING CW ROTATION OF MOTOR VIEWED FROM LEAD END



CW ROTATION OF ROTOR WHEN ENERGIZED WITH DC SUPPLY IN SEQUENCE SHOWN IN CHART BELOW

	A	B	C
1	+	-	-
2	+	-	-
3	-	+	-
4	-	+	-
5	-	-	+
6	-	-	+



REV	DCN	DESCRIPTION OF CHANGE	DATE	SIGN
2	007805	SEE DCN	2021-DEC-20	RMH
1	007775	INITIAL RELEASE	2021-NOV-23	AFT

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**Celera** A Novanta Company  
MOTION Company

DRAWN IAW ASME Y14.5-2009 X. ± 1.25 X.XX ± 0.125 X.X ± 0.25 X.XXX ± 0.0125 ANGULAR: X ± 1° UNITS **MM**

TITLE: **STATOR INTERFACE DRAWING**

DRWN: **A.TEAO** 10/11/2021 DRAWING NUMBER: **P100-1-095-XX** REV **2**

CHKD: **R. HORN** 11/10/2021

SURFACE FINISH: **NA** APPVD: **S. DAWSON** 11/10/2021 SCALE: **5:4** SIZE: **B** SHEET **1** of **3**

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONTROLLED

THIS SHEET APPLIES TO MODELS WITH HALLS/COMMUTATION

LEAD COLOR CODE

POWER LEADS

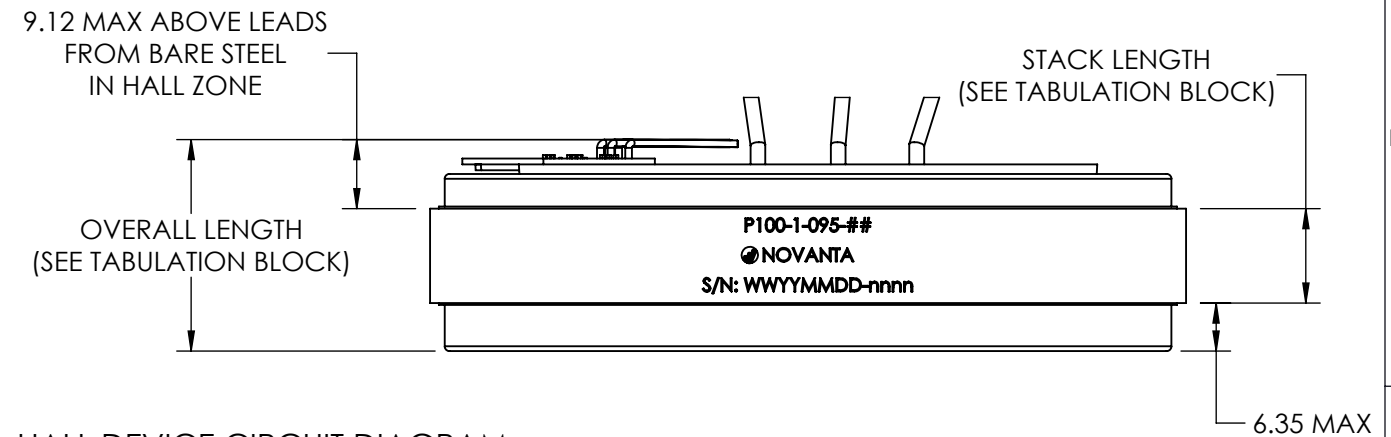
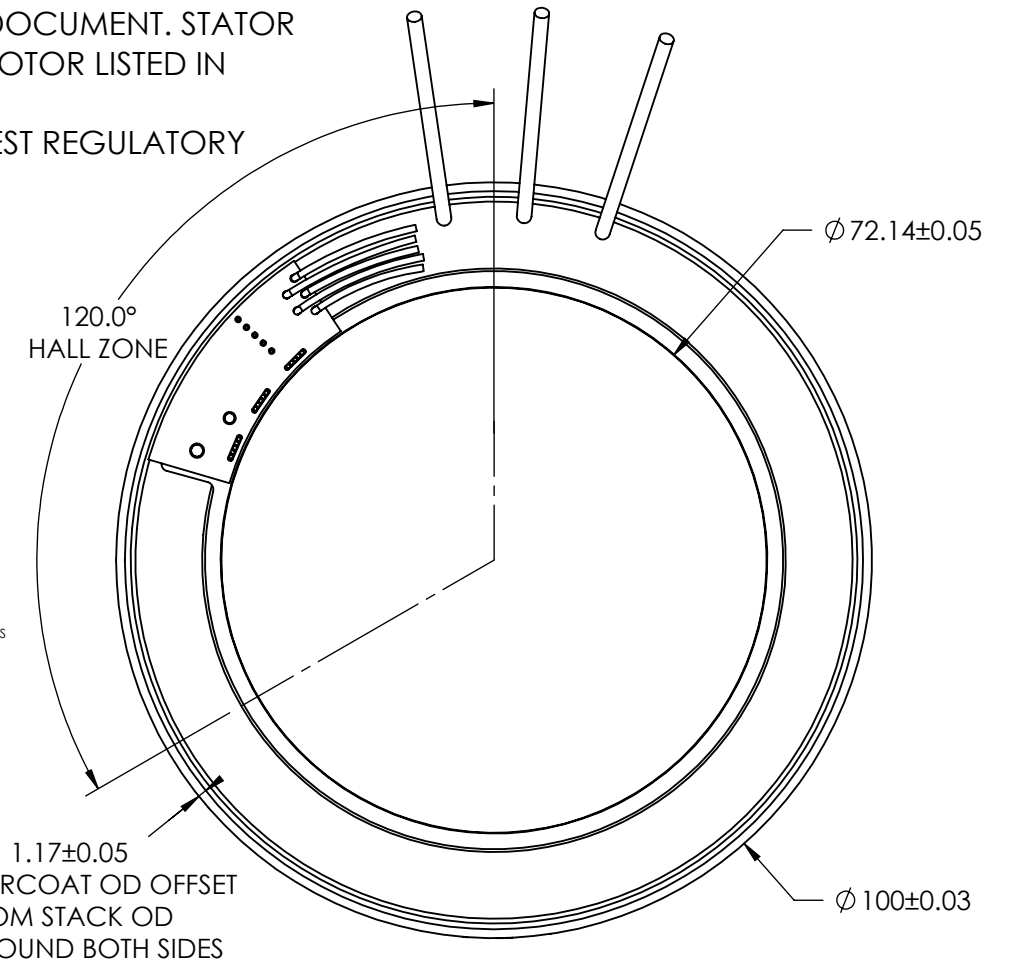
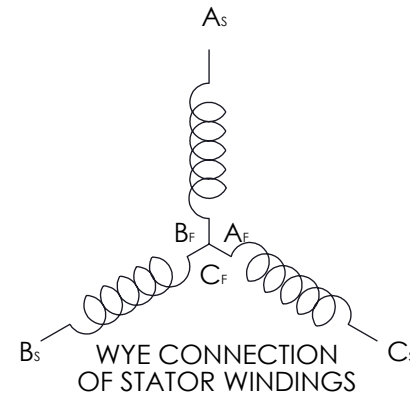
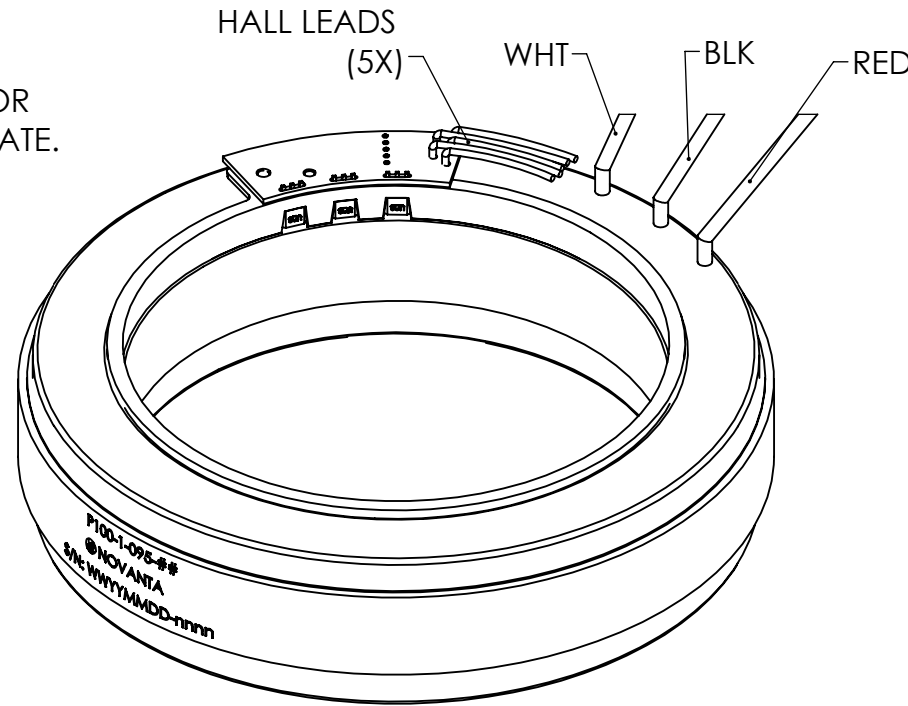
16 AWG, M22759/11 TEFLON COATED  
762mm MIN LENGTH, FLYING LEADS  
BLK - PHASE A  
RED - PHASE B  
WHT - PHASE C

HALL LEADS

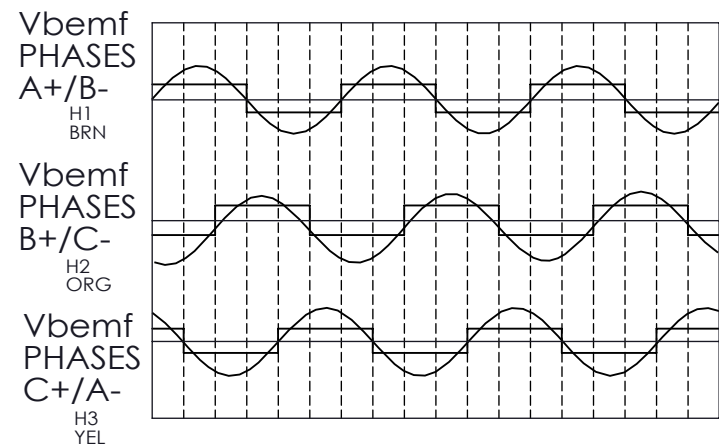
28 AWG, M22759/11 TEFLON COATED  
762mm MIN LENGTH, FLYING LEADS  
NOTE: HALL DEVICES ARE OPEN COLLECTOR  
AND REQUIRE PULL-UP RESISTORS TO OPERATE.  
BLK - RETURN  
RED - POWER (3.5 TO 27 VDC)  
BRN - HALL 1  
ORG - HALL 2  
YEL - HALL 3

NOTES:

1. STATOR MOUNTING REQUIREMENTS, REFER TO P100-1-051-01 DOCUMENT.
2. STATOR PERFORMANCE REFER TO P100-1-052-01 DOCUMENT. STATOR PERFORMANCE IS ACHIEVED WITH ASSOCIATED ROTOR LISTED IN TABULATION TABLE ON SHEET 3.
3. STATOR IS REACH AND ROHS COMPLIANT TO LATEST REGULATORY SPECIFICATIONS.
4. ESD SENSITIVE DEVICE, HANDLE ACCORDINGLY.



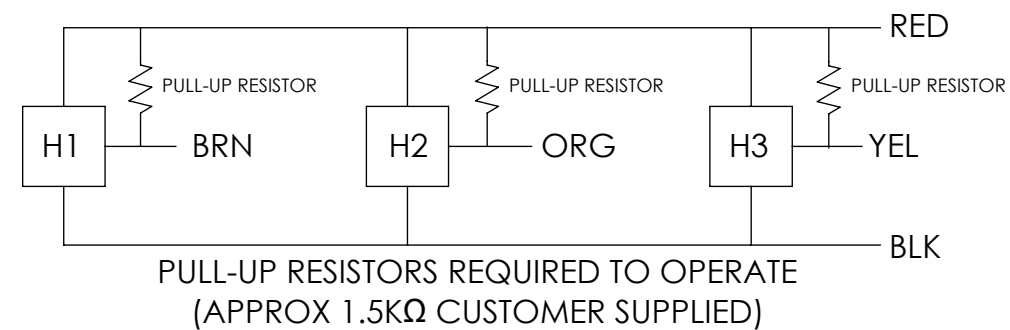
PHASE RELATION OF BACK EMF PHASE-TO-PHASE VOLTAGES DURING CW ROTATION OF MOTOR VIEWED FROM LEAD END



CW ROTATION OF ROTOR WHEN ENERGIZED WITH DC SUPPLY IN SEQUENCE SHOWN IN CHART BELOW

	A	B	C
1	+	-	-
2	+	-	-
3	-	+	-
4	-	+	+
5	-	-	+
6	-	-	+

HALL DEVICE CIRCUIT DIAGRAM



PULL-UP RESISTORS REQUIRED TO OPERATE (APPROX 1.5KΩ CUSTOMER SUPPLIED)

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**Celera** A Novanta Company  
MOTION

DRAWING NUMBER: **P100-1-095-XX** REV **2**  
SCALE: 1:1 SIZE: B SHEET 2 of 3



D

D

C

C

B

B

A

A

### TABULATION BLOCK

MODEL NUMBER	STATOR DRAWING NUMBER	ASSOCIATED ROTOR DRAWING NUMBER	STACK LENGTH	OVERALL LENGTH
OPN-100013-A000	P100-1-095-01	P100-1-096-01	12.5±.13	23.6 MAX
OPN-100013-B000	P100-1-095-03			
OPN-100013-C000	P100-1-095-05			
OPN-100025-A000	P100-1-095-07	P100-1-096-02	25.0±.13	36.1 MAX
OPN-100025-B000	P100-1-095-09			
OPN-100025-C000	P100-1-095-11			
OPN-100038-A000	P100-1-095-13	P100-1-096-03	37.5±.13	48.6 MAX
OPN-100038-B000	P100-1-095-15			
OPN-100038-C000	P100-1-095-17			
OPN-100050-A000	P100-1-095-19	P100-1-096-04	50.0±.13	61.1 MAX
OPN-100050-B000	P100-1-095-21			
OPN-100050-C000	P100-1-095-23			
OPH-100013-A000	P100-1-095-25	P100-1-096-01	12.5±.13	28.1 MAX
OPH-100013-B000	P100-1-095-27			
OPH-100013-C000	P100-1-095-29			
OPH-100025-A000	P100-1-095-31	P100-1-096-02	25.0±.13	40.6 MAX
OPH-100025-B000	P100-1-095-33			
OPH-100025-C000	P100-1-095-35			
OPH-100038-A000	P100-1-095-37	P100-1-096-03	37.5±.13	53.1 MAX
OPH-100038-B000	P100-1-095-39			
OPH-100038-C000	P100-1-095-41			
OPH-100050-A000	P100-1-095-43	P100-1-096-04	50.0±.13	65.6 MAX
OPH-100050-B000	P100-1-095-45			
OPH-100050-C000	P100-1-095-47			

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DRAWING NUMBER:	REV
<b>P100-1-095-XX</b>	<b>2</b>
SCALE: 1:1 <small>DO NOT SCALE DRAWING</small>	SIZE: B SHEET 3 of 3

