

THIS SHEET APPLIES TO MODELS WITHOUT HALLS

LEAD COLOR CODE

POWER LEADS

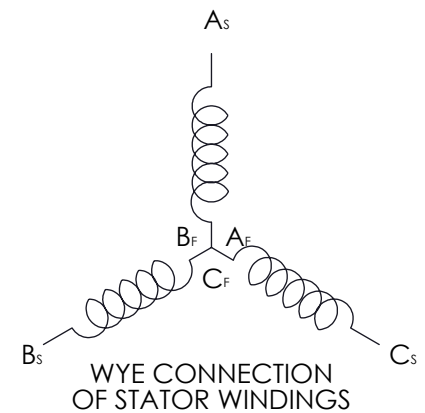
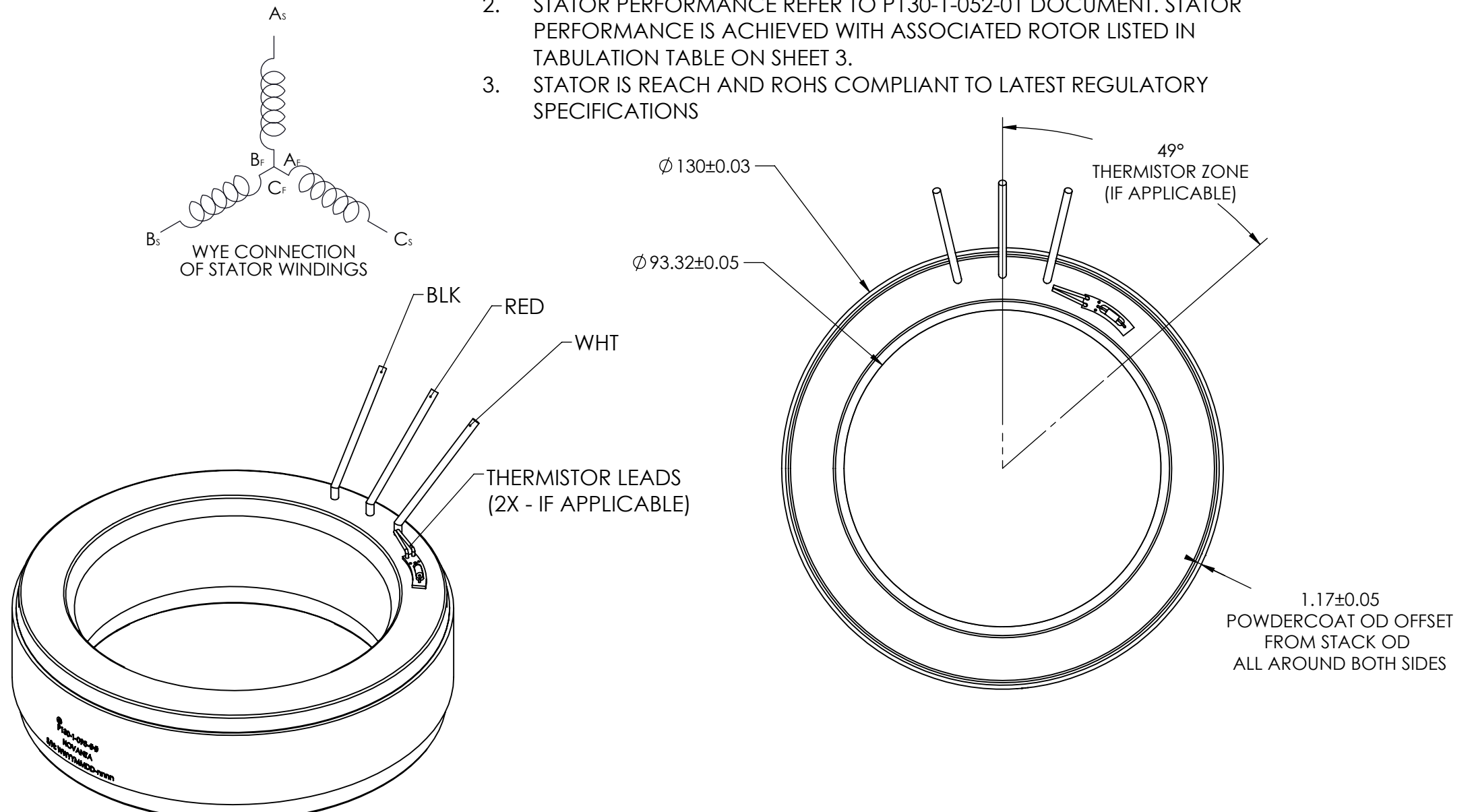
14 AWG, M22759/11 TEFLON COATED
 762 mm MIN LENGTH, FLYING LEADS
 BLK - PHASE A
 RED - PHASE B
 WHT - PHASE C

THERMISTOR LEADS (IF APPLICABLE)

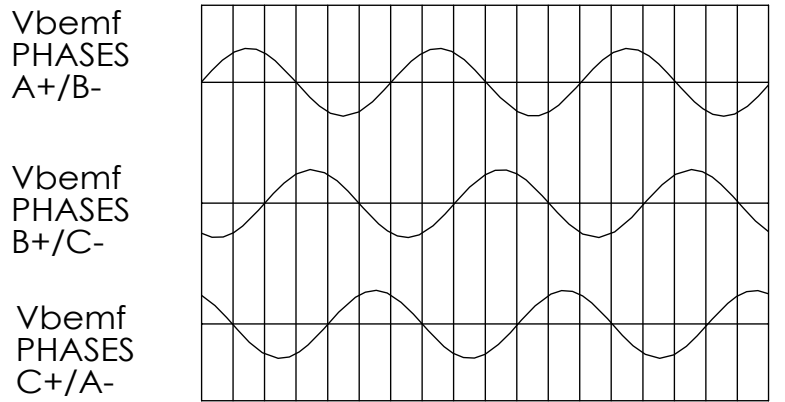
SENSOR PN: CANTHERM STS1 LINEAR PTC
 28 AWG, M22759/11 TEFLON COATED
 762 mm MIN LENGTH, FLYING LEADS
 2 BLUE LEADS, NO POLARITY REQUIREMENT

NOTES:

1. STATOR MOUNTING REQUIREMENTS, REFER TO P130-1-051-01 DOCUMENT.
2. STATOR PERFORMANCE REFER TO P130-1-052-01 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	-	-	+

CUSTOMER PCN LEVEL: STANDARD

CONFIDENTIAL								DRAWN IAW ASME Y14.5-2009 X.X ± 1.25 X.XX ± 0.125 X.XX ± 0.25 X.XXX ± 0.0125 ANGULAR: X ± 1°		UNITS MM			
THIS DRAWING CONTAINS PROPRIETARY INFORMATION OF CELERA MOTION AND MAY NOT BE IN WHOLE OR IN PART, DUPLICATED OR DISCLOSED OR USED FOR MANUFACTURE OF ANY PART DISCLOSED HEREIN WITHOUT THE PRIOR WRITTEN PERMISSION OF CELERA MOTION.						MATERIAL: NA		TREATMENT: NA		SURFACE FINISH: NA		TITLE: STATOR INTERFACE DRAWING DRWN: A.TEAO 8/2/2022 CHKD: R.HORN 8/4/2022 APPVD: R.HORN 8/4/2022	
REV	DCN	DESCRIPTION OF CHANGE	DATE	SIGN	DRAWING NUMBER: P130-1-095-XX SCALE: 1:1 SIZE: B SHEET 1 of 3								

THIS SHEET APPLIES TO MODELS WITH HALLS/COMMUTATION

NOTES:

1. STATOR MOUNTING REQUIREMENTS, REFER TO P130-1-051-01 DOCUMENT.
2. STATOR PERFORMANCE REFER TO P130-1-052-01 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 SPECIFICATION
4. ESD SENSITIVE DEVICE, HANDLE ACCORDINGLY

LEAD COLOR CODE

POWER LEADS

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

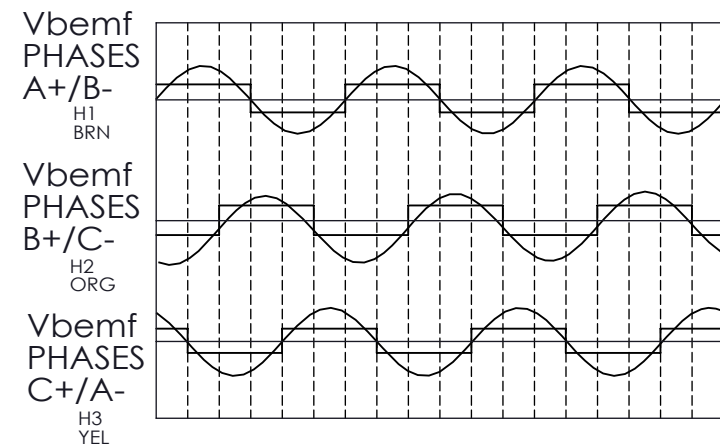
HALL LEADS

28 AWG, M22759/11 TEFLON COATED
762 mm 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

THERMISTOR LEADS (IF APPLICABLE)

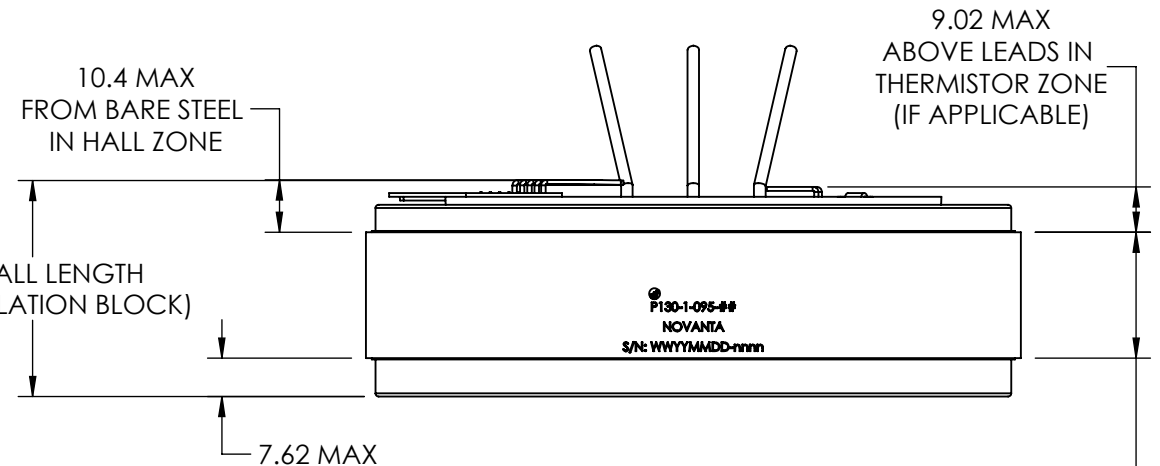
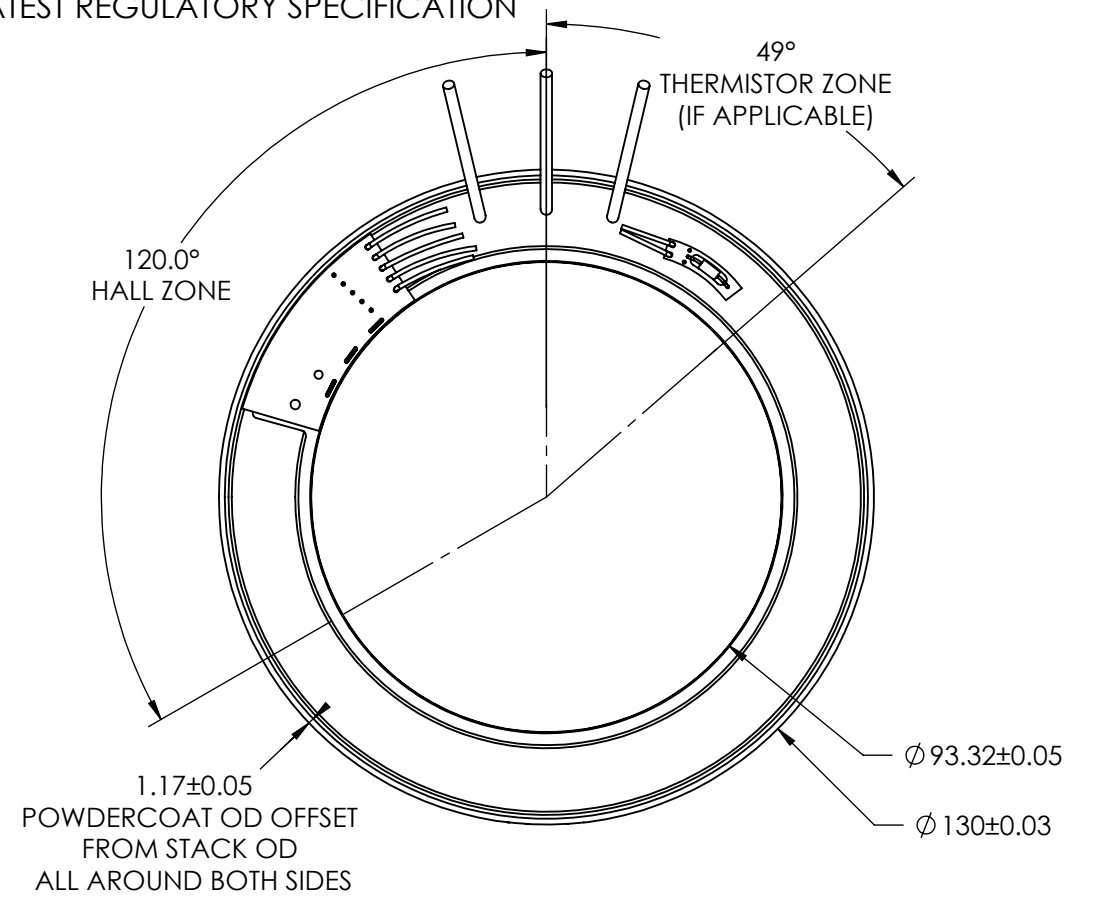
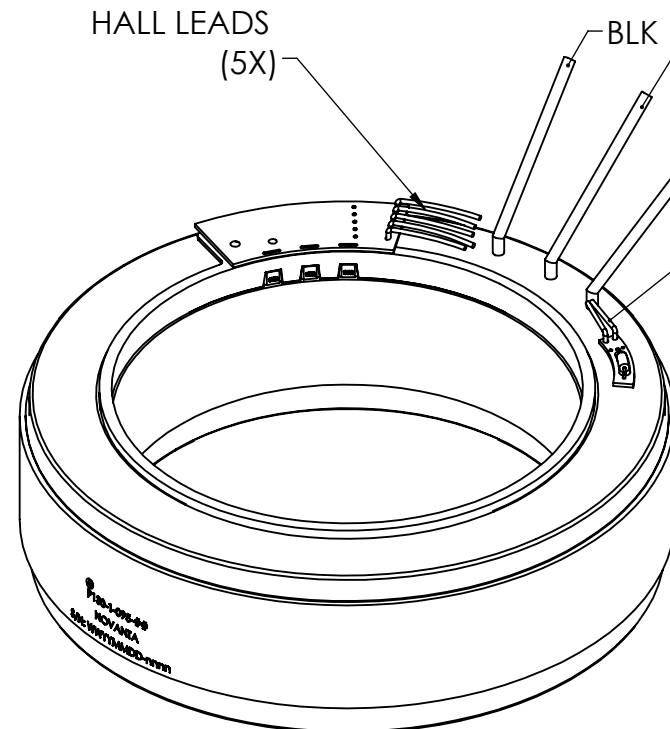
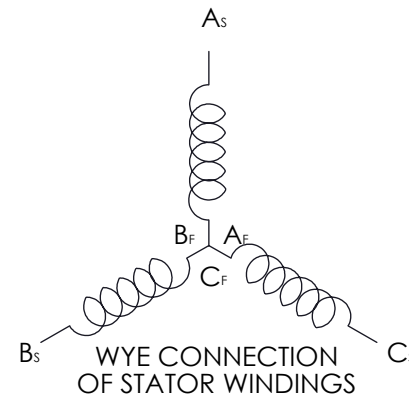
SENSOR PN: CANTHERM STS1 LINEAR PTC
28 AWG, M22759/11 TEFLON COATED
762 mm MIN LENGTH, FLYING LEADS
2 BLUE LEADS, NO POLARITY REQUIREMENT

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

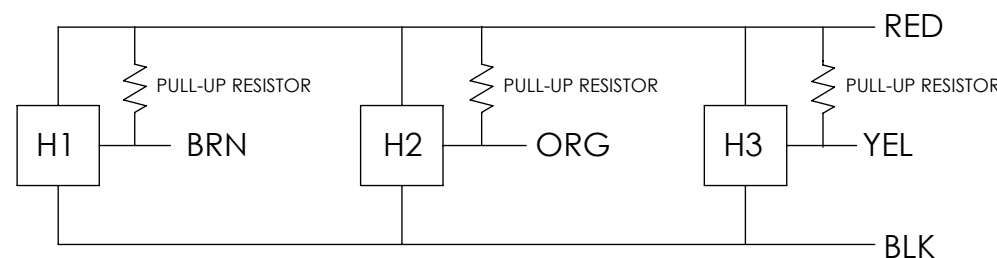


CW ROTATION OF ROTOR WHEN ENERGIZED WITH DC SUPPLY IN SEQUENCE SHOWN IN CHART BELOW

	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: **P130-1-095-XX** REV **A**
SCALE: 1:1 SIZE: B SHEET 2 of 3


TABULATION BLOCK (WITHOUT HALLS)

MODEL NUMBER	STATOR DRAWING NUMBER	THERMISTOR ADDED	ASSOCIATED ROTOR DRAWING NUMBER	STACK LENGTH	OVERALL LENGTH
OPN-130013-A000	P130-1-095-01	NO	P130-1-096-01	12.5 ± .13	25.7 MAX
OPN-130013-A001	P130-1-095-02	YES			29.3 MAX
OPN-130013-B000	P130-1-095-03	NO			25.7 MAX
OPN-130013-B001	P130-1-095-04	YES			29.3 MAX
OPN-130013-C000	P130-1-095-05	NO			25.7 MAX
OPN-130013-C001	P130-1-095-06	YES			29.3 MAX
OPN-130025-A000	P130-1-095-07	NO	P130-1-096-02	25.0 ± .13	38.2 MAX
OPN-130025-A001	P130-1-095-08	YES			41.7 MAX
OPN-130025-B000	P130-1-095-09	NO			38.2 MAX
OPN-130025-B001	P130-1-095-10	YES			41.7 MAX
OPN-130025-C000	P130-1-095-11	NO			38.2 MAX
OPN-130025-C001	P130-1-095-12	YES			41.7 MAX
OPN-130038-A000	P130-1-095-13	NO	P130-1-096-03	37.5 ± .13	50.7 MAX
OPN-130038-A001	P130-1-095-14	YES			54.3 MAX
OPN-130038-B000	P130-1-095-15	NO			50.7 MAX
OPN-130038-B001	P130-1-095-16	YES			54.3 MAX
OPN-130038-C000	P130-1-095-17	NO			50.7 MAX
OPN-130038-C001	P130-1-095-18	YES			54.3 MAX
OPN-130050-A000	P130-1-095-19	NO	P130-1-096-04	50.0 ± .13	63.2 MAX
OPN-130050-A001	P130-1-095-20	YES			66.8 MAX
OPN-130050-B000	P130-1-095-21	NO			63.2 MAX
OPN-130050-B001	P130-1-095-22	YES			66.8 MAX
OPN-130050-C000	P130-1-095-23	NO			63.2 MAX
OPN-130050-C001	P130-1-095-24	YES			66.8 MAX

TABULATION BLOCK (WITH HALLS)

MODEL NUMBER	STATOR DRAWING NUMBER	THERMISTOR ADDED	ASSOCIATE ROTOR DRAWING NUMBER	STACK LENGTH	OVERALL LENGTH
OPH-130013-A000	P130-1-095-25	NO	P130-1-096-01	12.5 ± .13	30.5 MAX
OPH-130013-A001	P130-1-095-26	YES			
OPH-130013-B000	P130-1-095-27	NO			
OPH-130013-B001	P130-1-095-28	YES			
OPH-130013-C000	P130-1-095-29	NO			
OPH-130013-C001	P130-1-095-30	YES			
OPH-130025-A000	P130-1-095-31	NO	P130-1-096-02	25.0 ± .13	43.0 MAX
OPH-130025-A001	P130-1-095-32	YES			
OPH-130025-B000	P130-1-095-33	NO			
OPH-130025-B001	P130-1-095-34	YES			
OPH-130025-C000	P130-1-095-35	NO			
OPH-130025-C001	P130-1-095-36	YES			
OPH-130038-A000	P130-1-095-37	NO	P130-1-096-03	37.5 ± .13	55.5 MAX
OPH-130038-A001	P130-1-095-38	YES			
OPH-130038-B000	P130-1-095-39	NO			
OPH-130038-B001	P130-1-095-40	YES			
OPH-130038-C000	P130-1-095-41	NO			
OPH-130038-C001	P130-1-095-42	YES			
OPH-130050-A000	P130-1-095-43	NO	P130-1-096-04	50.0 ± .13	68.0 MAX
OPH-130050-A001	P130-1-095-44	YES			
OPH-130050-B000	P130-1-095-45	NO			
OPH-130050-B001	P130-1-095-46	YES			
OPH-130050-C000	P130-1-095-47	NO			
OPH-130050-C001	P130-1-095-48	YES			

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Celera A Novanta Company
 MOTION
 DRAWING NUMBER: **P130-1-095-XX** REV **A**
 SCALE: 1:1 SIZE: B SHEET 3 of 3