

DRYSPELL PLUS

HEATLESS REGENERATIVE DESICCANT AIR DRYERS

Pneumatic*Plus*

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PRODUCT NAME : DRYSPELL PLUS
MODEL : DRYSPELL PLUS 375
ITEM CODE : PD214 (without Cover & Includes external Pre - Filter)

1. SPECIFICATIONS

Flow : 375 scfm
Maximum Operating Pressure : 16 bar (g) (232 PSI (g))
Rated Air Inlet Temperature : 38° C (100° F) (ISO:7183-1986 (E)) rated Dewpoint
Rated Operating Pressure : 7 bar (g) (101.5 PSI (g))
Recommended External Pre-Filter Rating: 0.01 Microns (ISO: 8573-1:2010 (E) Class 1)
Cycle Time : 4 Minutes
Operating Voltage : 100-240 VAC 50/60 Hz 1 Ph
Dew Point : -40° C (-40° F) PDP (ISO: 8573-1:2010 (E) Class 2)
End Connections : 2" NPT
Purge Loss : 15±1%
Noise Level : <70 dBA
Pressure Drop : <0.3 bar (g) (<4.3 PSI (g))

2. TECHNICAL DATA

2.1 ADSORBER DATA

Type of adsorbent : Mixed Bed of Activated Alumina & Molecular Sieves
Adsorber Shell : Aluminum IS 63400
Top & Bottom Block : Aluminum IS 63400

2.2 PROCESS DATA

Description	Purge Optimizer			
	100%	80%	60%	40%
Cycle Time (min)	4	4	4	4
Drying Time (min)	2	2	2	2
Regeneration Time (Sec)	90	72	54	36
De-pressurization time (sec)	30	48	66	84

3. FILTER DATA

3.1 Standard with all units

Internal Built In After Filter Micron Rating : 25 Micron (ISO:8573-1:2010 (E) Class 5)

3.2 Included with Item Code PD214

External Pre-Filter Particle Removal Rating	: 0.01 Micron (ISO:8573-1:2010 (E) Class 1)
Pre- Filter Oil Removal Rating	: 0.01 mg/m ³ (ISO:8573-1:2010 (E) Class 1)
Filtering Media	: Borosilicate Microfiber Glass
Efficiency	: 99.9%

3.3 Optional for all Units

External Post- Filter Particle Removal Rating	: 1 micron (ISO:8573-1:2010 (E) Class 2)
Post-Filter Oil Removal Rating	: 0.5 mg/m ³ (ISO:8573-1:2010 (E) Class 3)

4. ELECTRICAL DATA

Controller	: Custom Made Micro-Processor Based
Make	: Trident
Input Voltage	: 100-240 VAC 50/60 Hz 1 Ph
Output	: 24VDC
Display	: LED Indication for Drying, Re-Pressurization & Drain
Enclosure	: IP55 Protection
Certification	: cUL USA Marking

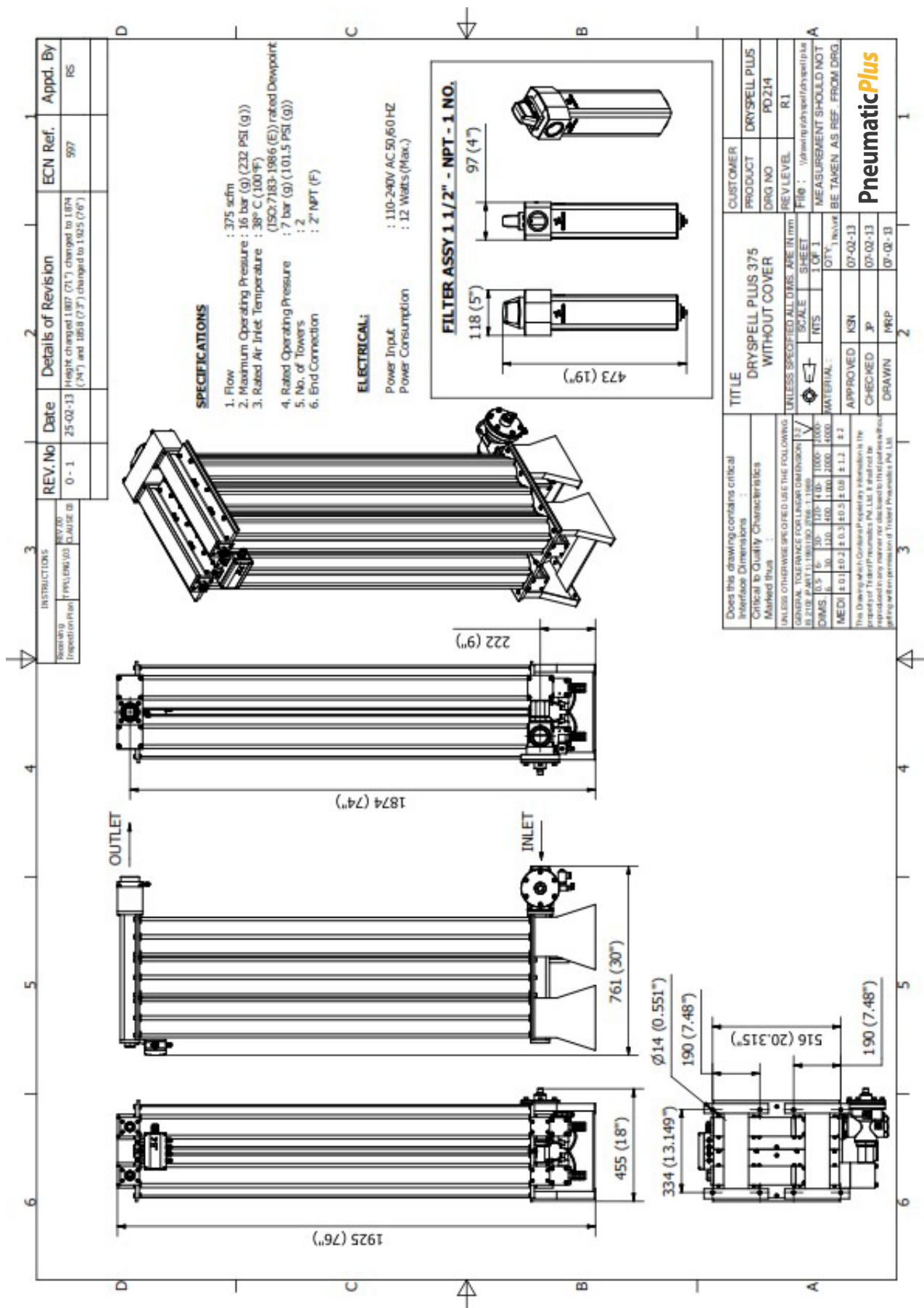
Dew Point Stretch Cycle:

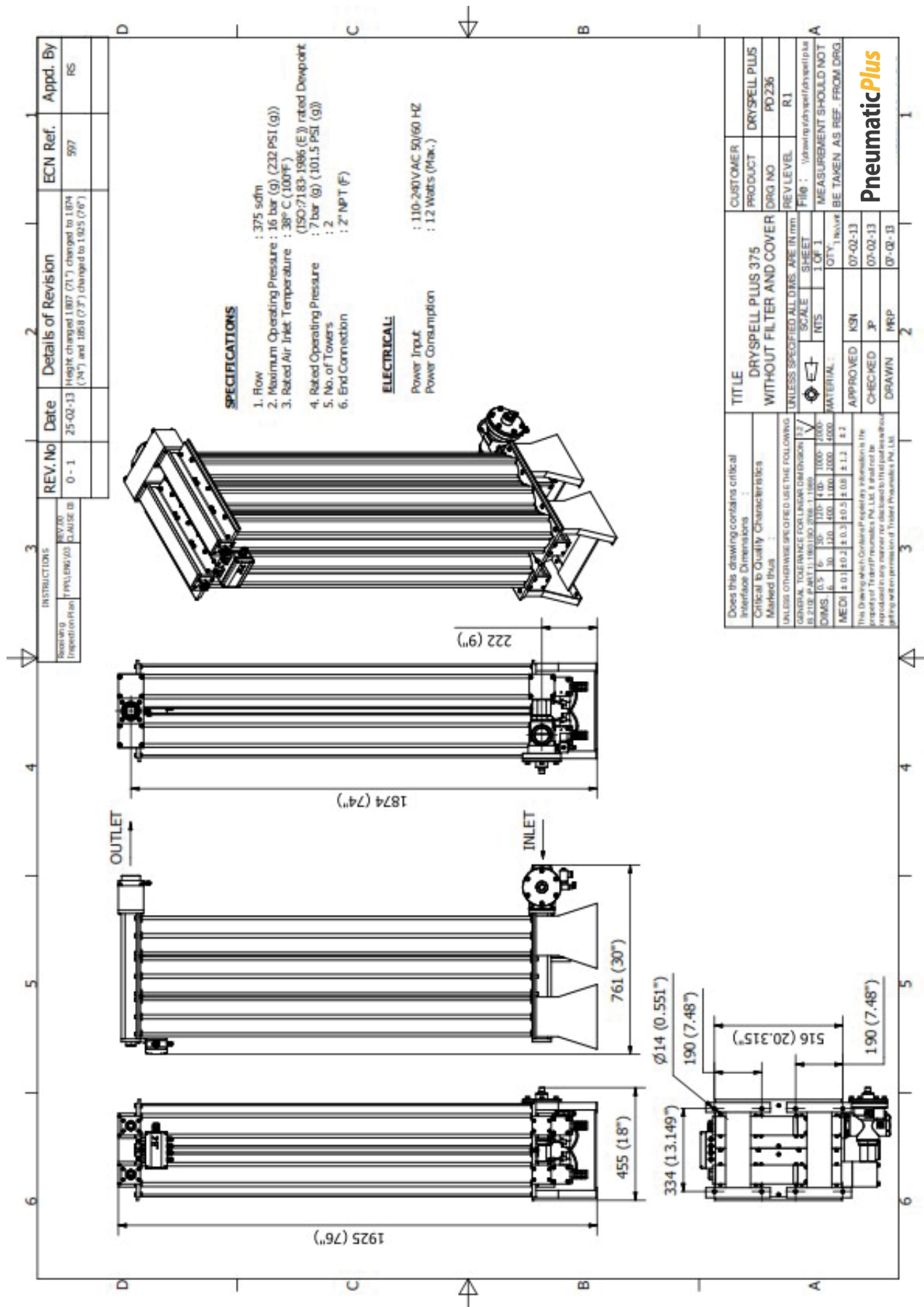
It stretches the moisture loading time of the desiccant bed by increasing the drying time. A dew point meter at the outlet with a required dew point setting provides the signal for the stretch cycle. This reduces the purge air in accordance to the air flow and dewpoint chosen. The purge occurs for the preprogrammed time during this time.

Purge Optimizer:

It reduces the percentage of regeneration flow based on the front panel setting. It has 4 options 40%, 60%, 80% & 100% purge optimization cycles respectively. The settings correspond to flow or moisture load through the dryer.

Separate LED Indicators for Tower Status, Purge Optimizer & Condensate Drain





CONTROLLER ELECTRICAL DIAGRAM

Note:

- P - Power
- T1 - Tower 1 Solenoid wire
- T2 - Tower 2 Solenoid wire
- I - Inlet Valve
- S - Dew point switching input wire

Wiring Schematic Details:

- Power (P)** connects to **Supply power** (85 - 260 Volts, 1 Phase, 60 Hz only).
- T1** and **T2** connect to **Inlet Valve Tower 1** and **Tower 2** respectively.
- I** connects to **Inlet Valve Tower 1**.
- S** connects to **Dew point input wires**.
- External Solenoid Control** and **Purge Solenoid** are also shown.

Econo Mode : Dew point 'good' contact closed
Run Mode : Contact open
Dryer will stop switching towers and purge air until contacts are open (Dew point poor)

Does this drawing contain critical dimensions :		TITLE		CUSTOMER
Critical to Quality Characteristics		CONTROLLER DS31-200 ELECTRICAL		PRODUCT
Marked Plus :		UNLESS SPECIFIED ALL DIMS. ARE IN mm		DWG NO
UNLESS OTHERWISE SPECIFIED USE THE FOLLOWING: GENERAL TOLERANCE FOR LINEAR DIMENSION IS ±0.15 (PRACT 1199 ISO 2768 -1 1998) ANGLE 0° 5' 30" 1° 30' 1° 50' 2° 00' 2° 30' 3° 00' 3° 30' 4° 00' 4° 30' 5° 00' 5° 30' 6° 00' 6° 30' 7° 00' 7° 30' 8° 00' 8° 30' 9° 00' 9° 30' 10° 00' 10° 30' 11° 00' 11° 30' 12° 00' 12° 30' 13° 00' 13° 30' 14° 00' 14° 30' 15° 00' 15° 30' 16° 00' 16° 30' 17° 00' 17° 30' 18° 00' 18° 30' 19° 00' 19° 30' 20° 00' 20° 30' 21° 00' 21° 30' 22° 00' 22° 30' 23° 00' 23° 30' 24° 00' 24° 30' 25° 00' 25° 30' 26° 00' 26° 30' 27° 00' 27° 30' 28° 00' 28° 30' 29° 00' 29° 30' 30° 00' 30° 30' 31° 00' 31° 30' 32° 00' 32° 30' 33° 00' 33° 30' 34° 00' 34° 30' 35° 00' 35° 30' 36° 00' 36° 30' 37° 00' 37° 30' 38° 00' 38° 30' 39° 00' 39° 30' 40° 00' 40° 30' 41° 00' 41° 30' 42° 00' 42° 30' 43° 00' 43° 30' 44° 00' 44° 30' 45° 00' 45° 30' 46° 00' 46° 30' 47° 00' 47° 30' 48° 00' 48° 30' 49° 00' 49° 30' 50° 00' 50° 30' 51° 00' 51° 30' 52° 00' 52° 30' 53° 00' 53° 30' 54° 00' 54° 30' 55° 00' 55° 30' 56° 00' 56° 30' 57° 00' 57° 30' 58° 00' 58° 30' 59° 00' 59° 30' 60° 00' 60° 30' 61° 00' 61° 30' 62° 00' 62° 30' 63° 00' 63° 30' 64° 00' 64° 30' 65° 00' 65° 30' 66° 00' 66° 30' 67° 00' 67° 30' 68° 00' 68° 30' 69° 00' 69° 30' 70° 00' 70° 30' 71° 00' 71° 30' 72° 00' 72° 30' 73° 00' 73° 30' 74° 00' 74° 30' 75° 00' 75° 30' 76° 00' 76° 30' 77° 00' 77° 30' 78° 00' 78° 30' 79° 00' 79° 30' 80° 00' 80° 30' 81° 00' 81° 30' 82° 00' 82° 30' 83° 00' 83° 30' 84° 00' 84° 30' 85° 00' 85° 30' 86° 00' 86° 30' 87° 00' 87° 30' 88° 00' 88° 30' 89° 00' 89° 30' 90° 00' 90° 30' 91° 00' 91° 30' 92° 00' 92° 30' 93° 00' 93° 30' 94° 00' 94° 30' 95° 00' 95° 30' 96° 00' 96° 30' 97° 00' 97° 30' 98° 00' 98° 30' 99° 00' 99° 30' 100° 00' 100° 30' 101° 00' 101° 30' 102° 00' 102° 30' 103° 00' 103° 30' 104° 00' 104° 30' 105° 00' 105° 30' 106° 00' 106° 30' 107° 00' 107° 30' 108° 00' 108° 30' 109° 00' 109° 30' 110° 00' 110° 30' 111° 00' 111° 30' 112° 00' 112° 30' 113° 00' 113° 30' 114° 00' 114° 30' 115° 00' 115° 30' 116° 00' 116° 30' 117° 00' 117° 30' 118° 00' 118° 30' 119° 00' 119° 30' 120° 00' 120° 30' 121° 00' 121° 30' 122° 00' 122° 30' 123° 00' 123° 30' 124° 00' 124° 30' 125° 00' 125° 30' 126° 00' 126° 30' 127° 00' 127° 30' 128° 00' 128° 30' 129° 00' 129° 30' 130° 00' 130° 30' 131° 00' 131° 30' 132° 00' 132° 30' 133° 00' 133° 30' 134° 00' 134° 30' 135° 00' 135° 30' 136° 00' 136° 30' 137° 00' 137° 30' 138° 00' 138° 30' 139° 00' 139° 30' 140° 00' 140° 30' 141° 00' 141° 30' 142° 00' 142° 30' 143° 00' 143° 30' 144° 00' 144° 30' 145° 00' 145° 30' 146° 00' 146° 30' 147° 00' 147° 30' 148° 00' 148° 30' 149° 00' 149° 30' 150° 00' 150° 30' 151° 00' 151° 30' 152° 00' 152° 30' 153° 00' 153° 30' 154° 00' 154° 30' 155° 00' 155° 30' 156° 00' 156° 30' 157° 00' 157° 30' 158° 00' 158° 30' 159° 00' 159° 30' 160° 00' 160° 30' 161° 00' 161° 30' 162° 00' 162° 30' 163° 00' 163° 30' 164° 00' 164° 30' 165° 00' 165° 30' 166° 00' 166° 30' 167° 00' 167° 30' 168° 00' 168° 30' 169° 00' 169° 30' 170° 00' 170° 30' 171° 00' 171° 30' 172° 00' 172° 30' 173° 00' 173° 30' 174° 00' 174° 30' 175° 00' 175° 30' 176° 00' 176° 30' 177° 00' 177° 30' 178° 00' 178° 30' 179° 00' 179° 30' 180° 00' 180° 30' 181° 00' 181° 30' 182° 00' 182° 30' 183° 00' 183° 30' 184° 00' 184° 30' 185° 00' 185° 30' 186° 00' 186° 30' 187° 00' 187° 30' 188° 00' 188° 30' 189° 00' 189° 30' 190° 00' 190° 30' 191° 00' 191° 30' 192° 00' 192° 30' 193° 00' 193° 30' 194° 00' 194° 30' 195° 00' 195° 30' 196° 00' 196° 30' 197° 00' 197° 30' 198° 00' 198° 30' 199° 00' 199° 30' 200° 00' 200° 30' 201° 00' 201° 30' 202° 00' 202° 30' 203° 00' 203° 30' 204° 00' 204° 30' 205° 00' 205° 30' 206° 00' 206° 30' 207° 00' 207° 30' 208° 00' 208° 30' 209° 00' 209° 30' 210° 00' 210° 30' 211° 00' 211° 30' 212° 00' 212° 30' 213° 00' 213° 30' 214° 00' 214° 30' 215° 00' 215° 30' 216° 00' 216° 30' 217° 00' 217° 30' 218° 00' 218° 30' 219° 00' 219° 30' 220° 00' 220° 30' 221° 00' 221° 30' 222° 00' 222° 30' 223° 00' 223° 30' 224° 00' 224° 30' 225° 00' 225° 30' 226° 00' 226° 30' 227° 00' 227° 30' 228° 0				