



ENERGY



Model Indoor unit
Outdoor unit MSZ-AY20VGK(P)
MUZ-AY20VG

SEER



kW 2.0

SEER 8.6

kWh/annum 81

SCOP



kW 1.3 2.3

SCOP 5.2 4.2

kWh/annum 350 766

X
 X
 X



57dB



59dB



626/2011

JG79N650H01

DG79A09FH01



| | | | |
|--|---|------------------------------------|---|
| Ⓐ Model | Ⓑ Indoor unit | MSZ-AY15VGKP MSZ-AY15VGK | MSZ-AY20VGKP MSZ-AY20VGK |
| | | Ⓒ Outdoor unit | MUZ-AY15VG MUZ-AY20VG |
| Ⓓ Sound power levels on cooling mode | Ⓔ Inside dB | 54 | 57 |
| | Ⓕ Outside dB | 58 | 59 |
| Ⓖ Refrigerant | R32 GWP 675 *1 | | |
| Ⓗ Cooling | SEER | | 7,2 8,6 |
| | ① Energy efficiency class | A++ | A+++ |
| | ② Annual electricity consumption *2 kWh/a | 72 | 81 |
| | ③ Design load kW | 1,5 | 2,0 |
| Ⓜ Heating (Average / Warmer / Colder season) | SCOP | | 4,0 / 4,7 / - 4,2 / 5,2 / - |
| | ① Energy efficiency class | A+ / A++ / - | A+ / A+++ / - |
| | ② Annual electricity consumption *2 kWh/a | 558 / 267 / - | 766 / 350 / - |
| | ③ Design load kW | 1,6 / 0,9 / - | 2,3 / 1,3 / - |
| | ④ Declared capacity | kW at reference design temperature | 1,6(-10°C) / 0,9(2°C) / - |
| | | kW at bivalent temperature | 1,6(-10°C) / 0,9(2°C) / - |
| | | kW at operation limit temperature | 1,6(-15°C) / 1,6(-15°C) / - 1,8(-20°C) / 1,8(-20°C) / - |
| | ⑤ Back up heating capacity | kW | 0,0(-10°C) / 0,0(2°C) / - 0,0(-10°C) / 0,0(2°C) / - |

| | | | | | | |
|--|---|---|--|---|---|---|
| Deutsch | Italiano | Svenska | Polski | Eesti | Malti | Русский |
| Français | Ελληνικά | Česky | Slovensko | Gælge | Suomi | Norsk |
| Nederlands | Português | Slovensky | Български | Latviski | Türkçe | Українська |
| Español | Dansk | Magyar | Română | Lietuvių k. | Hrvatski | |
| Modell | Modello | Modell | Model | Mudel | Mudell | Модель |
| Modèle | Μοντέλο | Model | Model | Déanamh | Malli | Модел |
| Model | Modelo | Model | Модел | Modelis | Model | Модель |
| Modelo | Model | Model | Модел | Modelis | Model | Модель |
| Innengerät | Unità interna | Inomhusenhet | Jednostka wewnętrzna | Siseseade | Unità għal-ġewwa | Внутренний прибор |
| Appareil intérieur | Εσωτερική μονάδα | Vnitřní jednotka | Notranja enota | Aonad laistigh | Sisäyksikkö | Innendørsenhet |
| Binnenunit | Unidade interior | Vnútorná jednotka | Вътрешно тяло | Iekšelpu ierice | İç ünite | Внутрішній блок |
| Unidad interior | Indendørsenhet | Beltéri egység | Unitate de interior | Patalpoje montuojamas irenginys | Unutarnja jedinica | |
| Außengerät | Unità esterna | Utomhusenhet | Jednostka zewnętrzna | Välisseade | Unità għal-barra | Наружный прибор |
| Modèle extérieur | Εξωτερική μονάδα | Vnější jednotka | Zunanja enota | Aonad lasmuugh | Ulkoysikkö | Utendørsenhet |
| Buitenunit | Unidade exterior | Vonkajša jednotka | Външно тяло | Ārtelpas ierice | Diş ünite | Зовнішній блок |
| Unidad exterior | Udendørsenhet | Kültéri egység | Unitate de exterior | Lauke muontuojamas irenginys | Vanjska jedinica | |
| Schalleistungspiegel im Kühl-modus | Livelli di potenza sonora in modalità di raffreddamento | Bullennivā i nedkyllingstāget | Poziom mocy dźwięku w trybie chłodzenia | Mūratasemed jahutusrežiims fil-modalitāt tat-kessiħ | Livelli tal-qawwa tal-fsejjies fil-modalitāt tat-kessiħ | Значения уровня звуковой мощности в режиме охлаждения |
| Niveaux de puissance corrects en mode de refroidissement | Επίπεδα ισχύος ήχου στην κατάσταση ψύξης | Úrovň hlučnosti v režimu chlazení | Ravni zvočne moči v načinu hlajenja | Leibħel chumhacha fuaima ar-mihod fuarithe | Äänenvoimakkuustasot viilen-nystilissa | Lydrykkivār i avkjølingsmodus |
| Geluids niveaus in koelstand | Níveis de potência sonora em modo de arrefecimento | Hladiny akustického výkonu v režime chladenia | Niva na zvukovata močnost v režim h ovládzania | Akustiskās jaudas līmenis dzesēšanas režīmā | Soğutma modunda ses güç düzeyleri | Рівні звукової потужності у режимі охолодження |
| Niveles de potencia del sonido en el modo de refrigeración | Lydstyrkenivaeuer i kølefunktion | Hangnyomásszintek hűtés üzemből | Nivel sonor ī modul de rācire | Garsos galios lygis vésinimo režimu | Razine zvučnog tlaka pri hlađenju | |
| Innen | Interno | Insida | Wewnätrz | Sees | Ġewwa | Внутри |
| Ⓐ l'intérieur | Εσωτερικό | Uvnitř | Znotraj | Laistigh | Sisäpuoli | Innwendig |
| Binnenkant | Interior | Vo vnútri | Вътре | Iekštelpās | İç taraf | Усередині |
| Interior | Individig | Bent | Interior | Vidinis | Unutra | |
| Außen | Esterno | Utsida | Na zewnatrz | Väljas | Barra | Снаружи |
| Ⓐ l'extérieur | Εξωτερικό | Venu | Zunaj | Lasmuugh | Ulkopuoli | Utwendig |
| Buitenkant | Exterior | Vonku | Ha otvorenio | Ārtelpā | Diş taraf | Назовні |
| Exterior | Udvändig | A szabadban | Exterior | Īšorinis | Vari | |
| Kühlmittel | Refrigerante | Köldmedel | Czynnik chłodniczy | Kühlmutusagens | Refrigerant | Хладагент |
| Réfrigérant | Ψυκτικό | Chladivo | Hladilno sredstvo | Cuisnéán | Kylmääine | Kjølemedium |
| Koelmiddel | Refrigerante | Chladivo | Xhadilien agent | Aukstumaǵents | Soğutucu | Холодоагент |
| Refrigerante | Kølemiddel | Hűtőközeg | Refrigerent | Šaldalas | Rashladno sredstvo | |

| | | | | | | |
|---|---|---|--|--|--|---|
| Deutsch | Italiano | Svenska | Polski | Eesti | Malti | Русский |
| Français | Ελληνικά | Česky | Slovensko | Gælge | Suomi | Norsk |
| Nederlands | Português | Slovensky | Български | Latviski | Türkçe | Українська |
| Español | Dansk | Magyar | Română | Lietuvių k. | Hrvatski | |
| Kühlen | Raffreddamento | Kyla | Chłodzenie | Jahutus | Tkessiħ | Охлаждение |
| Refroidissement | Ψύξη | Chlazení | Hlajenje | Fuarú | Viilennys | Avkjøling |
| Koelen | Arrefecimento | Chladenie | Ochładzanie | Dzesēšana | Soğutma | Охоподженнен |
| Refrigeración | Køling | Hűtés | Räcire | Vésinimas | Hlađenje | |
| Energieeffizienzklasse | Classe di efficienza energetica | Energiklass | Klasa energetyczna | Energiatħohusse klas | Klassi tal-effiċċjenza fl-užu tal-enerġija | Класс эффективности использования энергии |
| Classe d'efficacité énergétique | Κλάση ενεργειακής απόδοσης | Tríða energetické účinnosti | Razred energetiske učinkovitosti | Aicme ēifeachtulachta fuinnimh | Energiatehokkuusluokka | Energieeffektivitetsklasse |
| Energieeffizienzklasse | Classe de eficiència energética | Trieda energetickej účinnosti | Knacs na enerģijai efektivitost | Energoefektivitātes klase | Energi verimlīk sinifi | Клас ефективності енергоспоживання |
| Clase de eficiencia energética | Energieeffektivitetsklass | Energiahátekonyiségi osztály | Clasă de eficiență energetică | Energijski vartojimo efektyvumo klasė | Klasa energetiske učinkovitosti | |
| Jahresstromverbrauch *2 | Consumo annuale di energia elettrica *2 | Arlig strömforbrukning *2 | Zužycie prądu w skali roku *2 | Aastane voolutarbimus *2 | Konsum annwali tal-elettriku *2 | Годовое потребление электроэнергии *2 |
| Consommation d'électricité annuelle *2 | Ετήσια κατανάλωση ρεύματος *2 | Roční spotřeba elektrické energie *2 | Letna poraba elektrike *2 | Īdu leictreachais bhilantiūl *2 | Vuotuinen sähkökulutus *2 | Årlig strömforbruk *2 |
| Jaarlijks elektriciteitsverbruik *2 | Consumo anual de electricidadade *2 | Ročná spotreba elektriny *2 | Godišnja konsumacija na elektroneenergija *2 | Gada elektroenerģijas patēriņš *2 | Yıllık elektrik tüketimi *2 | Річне споживання електроенергії *2 |
| Consumo anual de electricidad *2 | Ärligt elforbrug *2 | Éves áramfogyasztás *2 | Consum anual de electricitate *2 | Metinis elektros energijos suvarojimas *2 | Godišnja potrošnja električne energije *2 | |
| Lastauslegung | Carico nominale | Dimensionerande belastning | Maksymalne obciążenie | Projekteeritud koormus | Tagħbija tad-disinn | Расчетная нагрузка |
| Charge de calcul | Σχεδιασμός φόρτωσης | Jmenovitý zatížení | Nazivna obremenitev | Lód deartha | Laskettu kuormitus | Utformningsbelastning |
| Ontwerpbelasting | Carga nominal | Projektované zatíženie | Проектен товар | Aprékinā slodze | Tasarrim yükü | Розрахункове навантаження |
| Carga de diseño | Brugslast | Méretezési terhelés | Sarcină nominală | Projektinē apkrova | Teżina urejda | |
| Heizung (Durchschnitt / Wärmer / Kälte / Jahreszeit) | Riscaldamento (Stagione media / calda / fredda) | Värme (Genomsnittlig/varmare/kallare årsmedeld) | Ogrzewanie (umlarkowane / ciepliejsze / zimniejsze / sezonowe) | Kütlinne (keskmise/soojem/külmen periode) | Tishin (Medju / Aktar shun / Aktar kiesah / stagun) | Наргев (средний/теплый/холодный сезон) |
| Chauffage (Moyenne / Plus chaud / Plus froid / saison) | Θέρμανση (Έποχη με μέσες & υψηλότερες & χαμηλότερες θερμοκρασίες) | Topení (průměrná/teplá/studená sezóna) | Ogrevanje (popvrečni/toplejši/hladnejši letni čas) | Téamh (Meanteoch / Nios Teo / Nios Fuarie / séasúr) | Lämmitys (Välikausi / lämmintä kausi / kylmä kausi) | Varme (Middels / Varmere / Kaldere / årsid) |
| Verwarming (gemiddeld seizoen / warmer seizoen / kouder seizoen) | Aquecimento (Média estação / Estação mais quente / Estação mais fria) | Kúrenie (priemerné/teplejšie/chladnejšie obdobie) | Otopljenje (Средно / Topъл / Студен сезон) | Sildišana (vidēji siltā/siltā/aukstā/gadalaikā) | Istima (Ortalama / Daha sicak / Daha soğuk / mevsim) | Опалення (у середній/теплій/холодний сезон) |
| Calefacción (temporada promedio / temporal de koldere/kalde/season) | Opvarming (genomsnittlig/varme/érvask) | Fűtés (átlagos/melegebb/hidegebb évszak) | Incálzire (Anotimp normal/mai cald/mai rece) | Šildymas (vidutinis / šiltesnis / sárdesnis / sezoninis) | Grijanje (prosječno / toplige / hladnije / sezona) | |
| Nennkapazität | Capacità dichiarata | Deklarerad kapacitet | Deklarowana pojemność | Deklarerit vōimsus | Kapaċitāt ddikjarata | Гарантированная мощность |
| Capacité déclarée | Δηλωμένη χωρητικότητα | Udávaná kapacita | Prijavaļena zmogljivost | Toilleadh fógartha | Ilmoitetu teho | Erklært kapasitet |
| Aangegeven capaciteit | Capacidad declarada | Deklarovaný výkon | Обявена мощност | Deklarētā jauda | Beyan edilen kapasite | Гарантована потужність |
| Capacidad declarada | Erkläret kapacitet | Névleges teljesítmény | Capacitate declarată | Deklaruotas pajęgumas | Deklarirani kapacitet | |
| bei angegebener Referenztemperatur | alla temperatura di progetto di riferimento | vid dimensionerande referenstemperatur | w znamionowej temperaturze odniesienia | projekteerimise vordlustermpetatuuri juures | f'temperatura tad-disinn ta'referenza | при эталонной расчетной температуре |
| à la température de calcul de référence | σε θερμοκρασία σχεδιασμού αναφοράς | při referenční výpočtové teplotě | ob referenční nazivní temperaturi | ag teocht deartha tagartha | perusmittoituslämpötillassa | ved referansetemperatur for utforming |
| bij referentieontwerptemperatuur | à temperatura nominal de referência | pri referenčnej výpočtové teplotě | pri izčislitelnej projektna teplotu | aprēķina references temperatūrā | referans tasarrim sıcaklığında | При етапоний розрахунковій температурі |
| a temperatura de diseño de referencia | ved brugsafhængig referencetemperatur | tervezési referencia-hőmérsékleten | la temperatura de referință nominală | esant norminei projektinei temperaturări | pri referentnoj temperaturi | |
| bei bivalenter Temperatur | alla temperatura bivalente | vid bivalent temperatur | w temperaturze biwalentnej | bivalentē temperatūru juures | f'temperatura bivalenti | при бивалентной температуре |
| à température bivalente | σε θερμοκρασία δισθενούς λεπτούργιας | při bivalentní teplotě | pri bivalentní temperaturi | ag teocht dh | | |

PRODUCT INFORMATION (*1)

| | | | |
|---|---|--|-------------|
| ROOM AIR CONDITIONER | INDOOR MODEL OUTDOOR MODEL | MSZ-AY20VGK / MSZ-AY20VG MUZ-AY20VG | |
| Function (indicate if present) | | | |
| cooling | Y | | |
| heating | Y | | |
| Item | symbol | value | unit |
| Design load | | | |
| cooling | Pdesignc | 2.0 | kW |
| heating/Average | Pdesignh | 2.3 | kW |
| heating/Warmer | Pdesignh | 1.3 | kW |
| heating/Colder | Pdesignh | x | kW |
| Declared capacity for cooling, at indoor temperature 27(19)°C and outdoor temperature Tj | | | |
| Tj=35°C | Pdc | 2.0 | kW |
| Tj=30°C | Pdc | 1.5 | kW |
| Tj=25°C | Pdc | 1.0 | kW |
| Tj=20°C | Pdc | 0.9 | kW |
| Declared capacity for heating/Average season, at indoor temperature 20°C and outdoor temperature Tj | | | |
| Tj=-7°C | Pdh | 2.1 | kW |
| Tj=2°C | Pdh | 1.3 | kW |
| Tj=7°C | Pdh | 0.8 | kW |
| Tj=12°C | Pdh | 0.5 | kW |
| Tj=bivalent temperature | Pdh | 2.3 | kW |
| Tj=operating limit | Pdh | 1.8 | kW |
| Declared capacity for heating/Warmer season, at indoor temperature 20°C and outdoor temperature Tj | | | |
| Tj=2°C | Pdh | 1.3 | kW |
| Tj=7°C | Pdh | 0.8 | kW |
| Tj=12°C | Pdh | 0.5 | kW |
| Tj=bivalent temperature | Pdh | 1.3 | kW |
| Tj=operating limit | Pdh | 1.8 | kW |
| Declared capacity for heating/Colder season, at indoor temperature 20°C and outdoor temperature Tj | | | |
| Tj=-7°C | Pdh | x | kW |
| Tj=2°C | Pdh | x | kW |
| Tj=7°C | Pdh | x | kW |
| Tj=12°C | Pdh | x | kW |
| Tj=bivalent temperature | Pdh | x | kW |
| Tj=operating limit | Pdh | x | kW |
| Tj=-15°C | Pdh | x | kW |
| Bivalent temperature | | | |
| heating/Average | Tbiv | -10 | °C |
| heating/Warmer | Tbiv | 2 | °C |
| heating/Colder | Tbiv | x | °C |
| Cycling interval capacity | | | |
| for cooling | Pcyc | x | kW |
| for heating | Pcych | x | kW |
| Degradation co-efficient cooling | Cdc | 0.25 | - |
| Electric power input in power modes other than 'active mode' | | | |
| off mode | P _{OFF} | 1 | W |
| standby mode | P _{S8} | 1 | W |
| thermostat - off mode | P _{T0} | 8 | W |
| crankcase heater mode | P _{CK} | 0 | W |
| Capacity control (indicate one of three options) | | | |
| fixed | N | | |
| staged | N | | |
| variable | Y | | |
| Contact details for obtaining more information | MITSUBISHI ELECTRIC CORPORATION SHIZUOKA WORKS 3-18-1, Oshika, Suruga-ku, Shizuoka 422-8528, Japan E-mail: melshierp@MitsubishiElectric.co.jp | | |
| <small>(*1) This information is based on the "product information requirement" in COMMISSION REGULATION (EU) No. 206/2012.</small> | | | |
| <small>(*2) This GWP value is based on Regulation (EU) No. 517/2014 from IPCC 4th Assessment Report. For Regulation (EU) No. 626/2011, which cites the IPCC Third Assessment Report, Climate Change 2001, the GWP is 550.</small> | | | |

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

| | |
|------------------------|---|
| Average (mandatory) | Y |
| Warmer (if designated) | Y |
| Colder (if designated) | N |

| Item | symbol | value | unit |
|----------------------------|--------|-------|------|
| Seasonal efficiency | | | |
| cooling | SEER | 8.6 | - |
| heating/Average | SCOP/A | 4.2 | - |
| heating/Warmer | SCOP/W | 5.2 | - |
| heating/Colder | SCOP/C | x | - |

| Item | symbol | value | unit |
|---|--------|-------|------|
| Declared energy efficiency ratio, at indoor temperature 27(19) °C and outdoor temperature Tj | | | |
| Tj=35°C | EERd | 4.4 | - |
| Tj=30°C | EERd | 6.5 | - |
| Tj=25°C | EERd | 10.6 | - |
| Tj=20°C | EERd | 16.3 | - |

| Item | symbol | value | unit |
|--|--------|-------|------|
| Declared coefficient of performance/Average season, at indoor temperature 20°C and outdoor temperature Tj | | | |
| Tj=-7°C | COPd | 2.7 | - |
| Tj=2°C | COPd | 4.2 | - |
| Tj=7°C | COPd | 5.4 | - |
| Tj=12°C | COPd | 5.9 | - |
| Tj=bivalent temperature | COPd | 2.3 | - |
| Tj=operating limit | COPd | 1.9 | - |

| Item | symbol | value | unit |
|---|--------|-------|------|
| Declared coefficient of performance/Warmer season, at indoor temperature 20°C and outdoor temperature Tj | | | |
| Tj=2°C | COPd | 4.2 | - |
| Tj=7°C | COPd | 5.4 | - |
| Tj=12°C | COPd | 5.9 | - |
| Tj=bivalent temperature | COPd | 4.2 | - |
| Tj=operating limit | COPd | 1.9 | - |

| Item | symbol | value | unit |
|---|--------|-------|------|
| Declared coefficient of performance/Colder season, at indoor temperature 20°C and outdoor temperature Tj | | | |
| Tj=-7°C | COPd | x | - |
| Tj=2°C | COPd | x | - |
| Tj=7°C | COPd | x | - |
| Tj=12°C | COPd | x | - |
| Tj=bivalent temperature | COPd | x | - |
| Tj=operating limit | COPd | x | - |
| Tj=-15°C | COPd | x | - |

| Item | symbol | value | unit |
|------------------------------------|--------|-------|------|
| Operating limit temperature | | | |
| heating/Average | Tol | -20 | °C |
| heating/Warmer | Tol | -20 | °C |
| heating/Colder | Tol | x | °C |

| Item | symbol | value | unit |
|------------------------------------|--------|-------|------|
| Cycling interval efficiency | | | |
| for cooling | EERcyc | x | - |
| for heating | COPcyc | x | - |
| Degradation co-efficient heating | Cdh | 0.25 | - |

| Item | symbol | value | unit |
|-----------------|-----------------|-------|-------|
| cooling | Q _{CE} | 81 | kWh/a |
| heating/Average | Q _{HE} | 766 | kWh/a |
| heating/Warmer | Q _{HE} | 350 | kWh/a |
| heating/Colder | Q _{HE} | x | kWh/a |

| Item | symbol | value | unit |
|------------------------------------|-----------------|----------|-----------------------|
| Sound power level (indoor/outdoor) | L _{WA} | 57/59 | dB(A) |
| Global warming potential | GWP (*2) | 675 | kgCO ₂ eq. |
| Rated air flow (indoor/outdoor) | - | 395/1932 | m ³ /h |

Contact details for obtaining more information
MITSUBISHI ELECTRIC CORPORATION SHIZUOKA WORKS
3-18-1, Oshika, Suruga-ku, Shizuoka 422-8528, Japan
E-mail: melshierp@MitsubishiElectric.co.jp

(*1) This information is based on the "product information requirement" in COMMISSION REGULATION (EU) No. 206/2012.

(*2) This GWP value is based on Regulation (EU) No. 517/2014 from IPCC 4th Assessment Report. For Regulation (EU) No. 626/2011, which cites the IPCC Third Assessment Report, Climate Change 2001, the GWP is 550.

TECHNICAL DOCUMENTATION (1)

| | | | |
|----------------------|-------------------------------|--|--|
| ROOM AIR CONDITIONER | INDOOR MODEL OUTDOOR MODEL | MSZ-AY20VGK / MSZ-AY20VG MUZ-AY20VG | 250H*760W*199D (mm) 550H*800W*285D (mm) |
|----------------------|-------------------------------|--|--|

| Function | | |
|----------|--|---|
| cooling | | Y |
| heating | | Y |

| The heating season | | |
|------------------------|--|---|
| Average (mandatory) | | Y |
| Warmer (if designated) | | Y |
| Colder (if designated) | | N |

| Capacity control | | |
|------------------|--|---|
| fixed | | N |
| staged | | N |
| variable | | Y |

| Item | symbol | value | unit |
|--------------------------------|--------|-------|------|
| Seasonal efficiency (2) | | | |
| cooling | SEER | 8.6 | - |
| heating/Average | SCOP/A | 4.2 | - |
| heating/Warmer | SCOP/W | 5.2 | - |
| heating/Colder | SCOP/C | X | - |

| Energy efficiency class | | | |
|-------------------------|--------|------|---|
| cooling | SEER | A+++ | - |
| heating/Average | SCOP/A | A+ | - |
| heating/Warmer | SCOP/W | A+++ | - |
| heating/Colder | SCOP/C | X | - |

| Other items | | | |
|------------------------------------|-----------------|-------|-----------------------|
| Sound power level (indoor/outdoor) | L _{WA} | 57/59 | dB(A) |
| Refrigerant | - | R32 | - |
| Global warming potential | GWP (3) | 675 | kgCO ₂ eq. |

| | |
|---|---|
| identification and signature of the person empowered to bind the supplier | <u>7 Aug. 2023</u> <u>Mun</u> Kunihiro Morishita Department Manager, Quality Assurance Department MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD |
|---|---|

- (1) This information is based on COMMISSION DELEGATED REGULATION (EU)No. 626/2011.
(2) SEER/SCOP values are measured based on EN 14825:2016: Testing and rating at part load conditions and calculation of seasonal performance.
(3) This GWP value is based on Regulation(EU)No. 517/2014 from IPCC 4th Assessment Report.
For Regulation (EU) No. 626/2011, which cites the IPCC Third Assessment Report, Climate Change 2001, the GWP is 550.